4.3 Transportation/Circulation

Information contained in this section is summarized from the *Traffic Study for Calexico-SR111 Mixed Use Development in the Calexico Area of Imperial County* prepared by Darnell and Associates (August 20, 2008). The traffic study is provided in Technical Appendices – Volume I of II, Appendix B of this EIR.

In their response to the Notice of Preparation, the Public Utilities Commission expressed concern for increased congestion at the intersections of the railroad right-of-way (ROW) with Cole Road, Jasper Road, Fawcett Road, and Birch Street. Pedestrian circulation issues at these crossings was also raised. Project-related pedestrian traffic across the railroad ROW is not expected to be substantial because there is very limited existing and planned residential development west of the ROW from the project site. Any future improvement of Cole Road, Jasper Road, Fawcett Road, and Birch Street will have to consider the interaction of vehicular traffic with rail operations.

4.3.1 Existing Conditions

4.3.1.1 Methodologies

A. Level of Service

Level of Service (LOS) is a professional industry standard by which the operating conditions of a given roadway segment or intersection is measured. LOS ranges from A through F, where LOS A represents the best operating conditions and LOS F represents the worst operating conditions. LOS A facilities are characterized as having free flowing traffic conditions with no restrictions on maneuvering or operating speeds; traffic volumes are low and travel speeds are high. LOS F facilities are characterized as having forced flow with many stoppages and low operating needs. The roadway segment daily Level of Service (LOS) was determined by comparing the average daily traffic (ADT) volumes under all scenarios to the capacity of the roadway according to its roadway cross-section and classification. The City of Calexico and County of Imperial have different volume to capacity (V/C) ratio criteria. For purposes of the Traffic Study, the V/C ratio was utilized to calculate the LOS for the segments located in the City of Calexico and the ADTs were utilized for the segments located in the County of Imperial's jurisdiction. Where roads are in the City of Calexico, the City thresholds were used. Where roads are in the County, the County thresholds were used.

Synchro, version 6, was utilized to analyze the morning and afternoon peak hour conditions of the intersections in the project vicinity. The signalized intersection methodology defines LOS based on delay using variables such as lane configuration, traffic volumes, and signal timings. The unsignalized intersection methodology defines LOS based on the actual/projected longest delay experienced by any single movement. The measurement of effectiveness utilized in the traffic study is the average intersection delay, not the total intersection delay. It should be noted that the Synchro software is based on the 2000 Highway Capacity Manual (HCM).

B. Intersection Lane Vehicle Methodology

To comply with Caltrans' guidelines, the signalized intersections along state routes were also analyzed using the Intersecting Lane Vehicle (ILV) methodology. The ILV method determines the operating condition of an intersection based upon the number of intersecting vehicles that enter the intersection per lane during the hour (ILV/hr). Where less than 1200 ILV/hr represents stable flow, 1200 to 1500 ILV/hr represents unstable flow with considerable delays possible, and 1500 ILV/hr represents capacity, or stop-and-go operation with severe delay and heavy operation.

C. Scenarios Studied

The traffic scenarios analyzed in the traffic study are identified as follows:

Existing Conditions refers to that condition which exists on the ground today (Year 2006), including existing traffic counts and existing lane configurations at intersections and on roadway segments.

Existing Plus Project (Casino) Conditions refers to that condition which includes the Casino only phase of the project traffic added onto existing volumes.

Existing Plus Project (Casino+Phase1) Conditions refers to that conditions which includes the Casino and Phase 1 of the project traffic added onto existing volumes.

Year 2015 Conditions refers to that condition which will exist in the year 2015, including proposed improvements to the local intersections and roadway segments and a portion of development generated by other projects within the study area.

Year 2015 Plus Project (Casino) Conditions refers to that condition which includes the Casino only phase of project traffic added onto the Year 2015 forecasted traffic volumes.

Year 2015 Plus Total Project Conditions refers to that conditions which includes the total project traffic added onto the Year 2015 forecasted traffic volumes.

Year 2035 Conditions refers to that condition which will exist in the year 2035 along the Jasper Corridor, including proposed improvements to the intersections and roadway segments.

Year 2035 Plus Project Conditions refers to that condition which includes the total project traffic added onto the Year 2035 forecasted traffic volumes.

4.3.1.2 Existing Circulation Network

A. Roadway Segments

The key roadway segments in the vicinity of the project site that may be impacted by the proposed project include the following:

State Route 111 (SR-111) is a north/south four-lane circulation element roadway. North of Cole Road, SR-111 is a four lane divided roadway with limited access. The posted speed limit is 55 miles per hour (mph). The current cross-section is equivalent to that of an expressway. South of Cole Road, it is a four-lane roadway with a posted speed limit of 55 mph. The current cross-section is equivalent to that of a Highway,

capacity of 56,300 ADT at LOS E. State Route 111 is ultimately classified as an Expressway Road requiring two hundred ten (210) feet of right-of-way.

Meadows Road is a north/south circulation element roadway. Currently, Meadows Road is an unimproved dirt road from Abatti Road to Cole Road. Between Cole Road and State Route 98, Meadows Road is currently constructed as a four-lane divided roadway. The current cross-section of this segment of Meadows Road is equivalent to that of a Primary Road with a capacity of 37,500 ADT at LOS E per the City of Calexico classifications. Per the County of Imperial Circulation Element, Meadows Road from Abatti Road to Fawcett Road has the ultimate classification of a Major Collector, requiring eighty-four (84) feet of right-of-way with a capacity of 34,200 ADT at LOS E.

Bowker Road is a north/south two lane undivided circulation element roadway. No bike lanes or bus stops are provided and curbside parking is prohibited. The posted speed limit is 55 mph. The current cross section for the segments north of Jasper Road is equivalent to that of a Collector, capacity of 16,200 ADT at LOS E. South of Jasper Road, the cross section is equivalent to that of a Secondary Road, Capacity of 17,500 at LOS E. In the County of Imperial Circulation Element, Bowker Road from Interstate 8 to State Route 98 has an ultimate classification of a ~~Prime Arterial~~Expressway Road with a capacity of 57,000 ADT at LOS E. Bowker Road is classified as an Expressway Road requiring two hundred ten (210) feet of right-of-way, being one hundred five (105) feet. The southern section from Second Street to north of Jasper Road within the City of Calexico Sphere of Influence has a width from 100-126 feet.

Heber Road is an east/west two lane undivided circulation element roadway. No bike lanes or bus stops are provided, and there is no parking. The posted speed limit is 55 mph. The current cross section is equivalent to that of a Collector, capacity of 16,200 ADT at LOS E. In the County of Imperial Circulation Element, Heber Road has an ultimate classification of a Prime Arterial requiring one hundred thirty six (136) feet of right-of-way, being sixty-eight (68) feet from existing road centerline from SR-111 to Anderholt Road, with a capacity of 57,000 ADT at LOS E.

Jasper Road is an east/west two lane undivided circulation element roadway. No bike lanes or bus stops are provided, and there is no parking. The posted speed limit is 55 mph. The current cross section is equivalent to that of a Secondary, capacity of 17,500 ADT at LOS E. In the County of Imperial Circulation Element, Jasper Road has an ultimate classification of an Expressway.

State Route 98 (SR-98) is classified as a State Highway on the Imperial County Circulation Element. Within the City of Calexico city limits, SR-98 is an east-west facility, which currently provides two lanes of travel in each direction west of Meadows Road and one lane of travel in each direction east of Meadows Road. The posted speed limit is 45 mph between Rockwood Avenue and Bowker Road, and 65 mph between Bowker Road and Barbara Worth Road. There are no bike lanes or bus stops provided and curbside parking is prohibited. The current cross section of SR-98 between SR-111 and Meadows Road is equivalent to that of a Primary Road, capacity of 37,500 ADT at LOS E per the City of Calexico classifications. The current cross section of SR-98 east of Meadows Road is equivalent to that of a Collector, capacity of 17,500 ADT at LOS E per the City of Calexico classifications.

Figure 4.3-1 depicts the existing circulation conditions for the vicinity of the project site.

Roadway Segments Traffic Counts

Traffic counts along SR-111 were obtained from Caltrans from their 2005 counts. The remaining counts were collected in October 2005 by Darnell and Associates. It should be noted that new counts were collected at spot locations along Jasper Road east/west of SR-111 and at the intersection of Jasper Road/SR-111, as well as at Heber Road/SR-111. New counts (Year 2008) reflected lower traffic volumes than those collected in 2005. As such, this report analyzes the older count data since it is higher and represents worst case traffic conditions. Figure 4.3-2 depicts the existing daily traffic volumes used in the Traffic Study. Count summaries are included in Appendix A of the Traffic Study (Appendix B of this EIR).

Existing Level of Service Conditions

Daily Roadway Segments

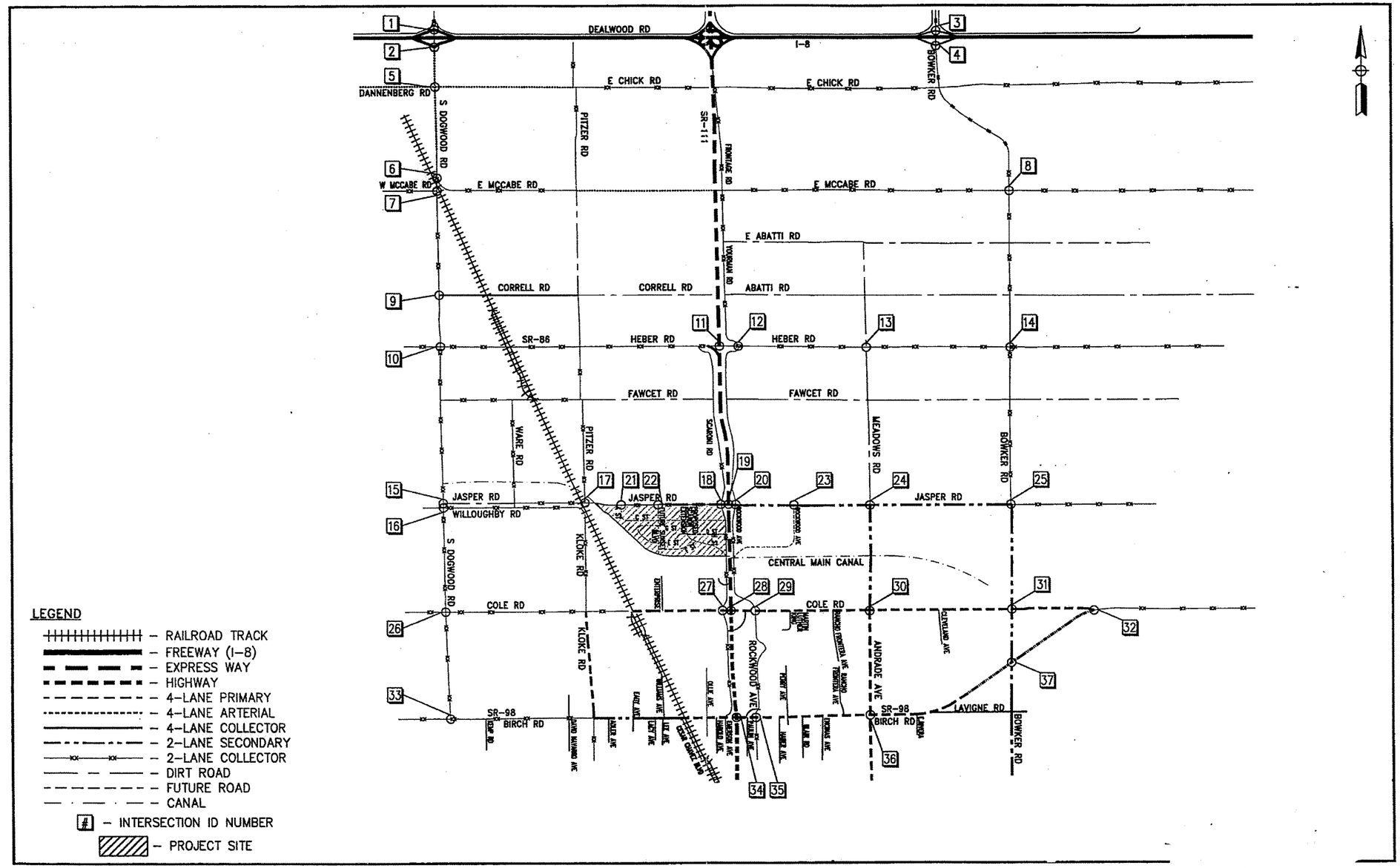
The existing roadway segment daily LOS are summarized in Table 4.3-1. As shown in Table 4.3-1, the following daily roadway segments report deficiencies:

- Dogwood Road: north of Interstate 8 (LOS E);
- SR-111: south of SR-98 (LOS D); and,
- Cole Road: Enterprise to SR-111 (LOS E).

B. Intersections

The scope of analysis for intersections in the traffic study was based on traffic dispersed to the interstate arterials. No numerical threshold was used. The key intersections in the vicinity of the project that may be impacted by the proposed project include the following:

- I-8 Westbound Ramp/Dogwood Road (two-way stop)
- I-8 Eastbound Ramp/Dogwood Road (two-way stop)
- I-8 Westbound Ramp/Bowker Road (two-way stop)
- I-8 Eastbound Ramp/Bowker Road (two-way stop)
- Dogwood Road/Chick/Dannenberg (signal)
- Dogwood Road/McCabe Road North (two-way stop)
- Dogwood Road/McCabe Road South (all-way stop)
- McCabe Road/Bowker Road (two-way stop)
- Dogwood Road/~~Abatti/~~Corell (two-way stop)
- Dogwood Road/Heber Road (all-way stop)
- SR-111/Heber Road (signal)
- Heber Road/Yourman Road (two-way stop)
- Heber Road/Bowker Road (two-way stop)
- Dogwood Road/Willoughby Road (two-way stop)
- Jasper Road/Pitzer Road (two-way stop)
- Jasper Road/Scaroni Avenue (all-way stop)
- Jasper Road/SR-111 (signal)



SOURCE: Darnell & Associates, Inc., 2008

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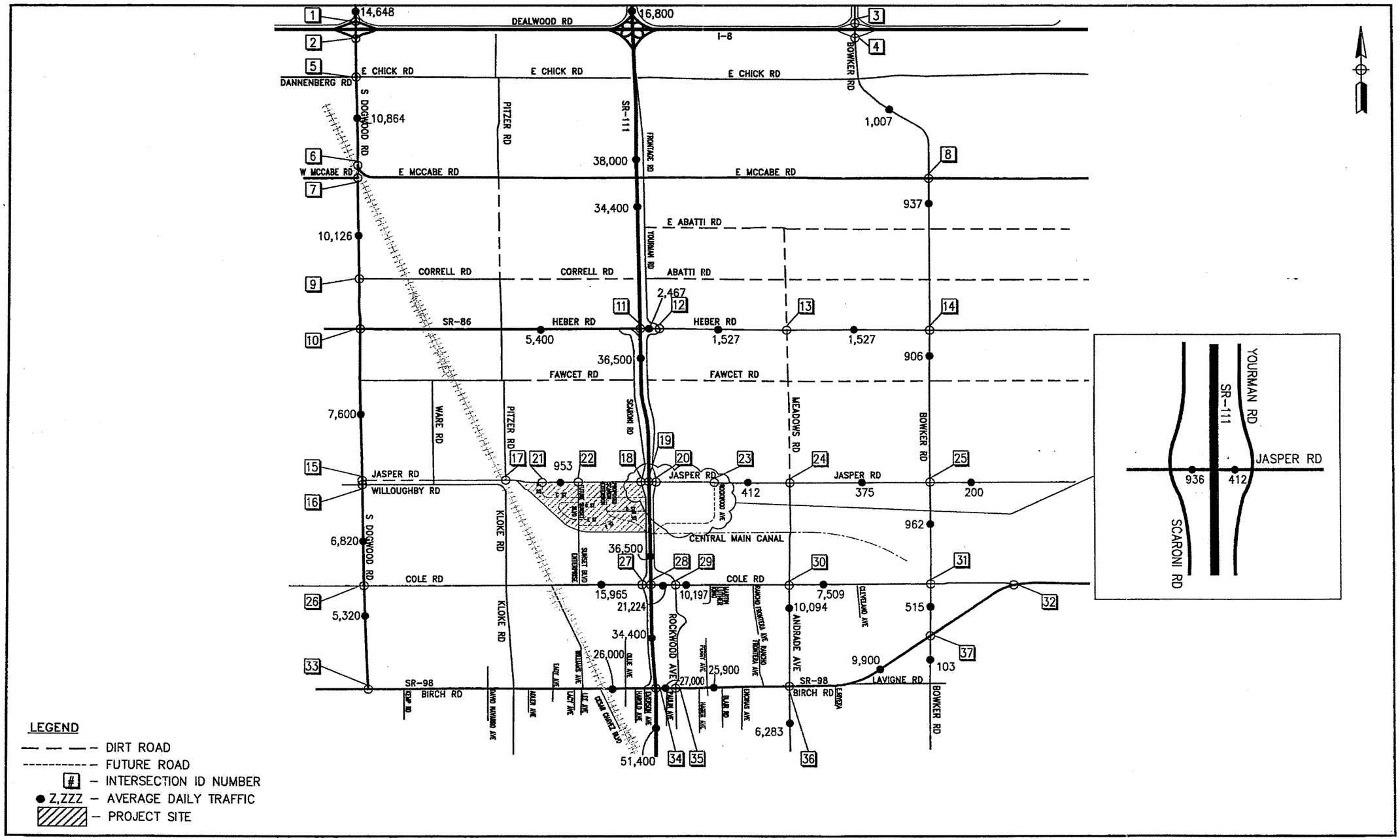
Existing Traffic Conditions

FIGURE 4.3-1

F:\projects\634 Calexico\1st Screencheck Draft EIR\Traffic Study Figures\Figure 4.3-1 Existing Traffic Conditions.ai



SOURCE: Darnell & Associates, Inc., 2008

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Existing Daily Traffic Volumes

FIGURE 4.3-2

F:\projects\634 Calexico\1st Screencheck Draft EIR\Traffic Study Figures\Figure 4.3-2 Existing Daily Traffic Volumes.ai

TABLE 4.3-1
Existing Roadway Segment Level of Service

Road Segment	Max Capacity	Existing Conditions		
		ADT	V/C	LOS
Dogwood Road:				
north of I-8	16,200	14,648	0.904	E
I-8 to McCabe	16,200	10,864	0.671	B
McCabe to SR-86	16,200	10,126	0.625	B
SR-86 to Jasper	16,200	7,600	0.469	A
Jasper to Cole	16,200	6,820	0.421	A
Cole to SR-98	16,200	5,230	0.328	A
SR-111:				
north of I-8	56,300	16,800	0.298	A
I-8 to McCabe	56,300	38,000	0.675	B
McCabe to Heber	56,300	34,400	0.611	B
Heber to Jasper	56,300	36,500	0.648	B
Jasper to Cole	56,300	36,500	0.648	B
Cole to SR-98	56,300	34,400	0.611	B
South of SR-98	60,000	51,400	0.857	D
Bowker Road:				
I-8 to McCabe	16,200	1,007	0.062	A
McCabe to Heber	16,200	937	0.058	A
Heber to Jasper	16,200	906	0.056	A
Jasper to Cole	16,200	962	0.059	A
Cole to SR-98	17,500	515	0.029	A
South of SR-98	17,500	103	0.006	A
Meadows Road:				
Cole to SR-98	17,500	10,094	0.577	A
South of SR-98	17,500	6,283	0.359	A
SR-86/Heber Road:				
Pitzer to SR-111	16,200	5,400	0.333	C
SR-111 to Yourman	16,200	2,467	0.152	B
Yourman to Meadows	16,200	1,527	0.094	A
Meadows to Bowker	16,200	1,527	0.094	A
Jasper Road:				
Scaroni to SR-111	17,500	936	0.053	A
SR-111 to Yourman	17,500	412	0.024	A
Yourman to Meadows	17,500	412	0.024	A
Meadows to Bowker	17,500	375	0.021	A
Cole Road:				
Enterprise to SR-111	17,500	15,965	0.912	E
SR-111 to Yourman	37,500	21,224	0.566	A
Yourman to Meadows	37,500	10,197	0.272	A
Meadows to Bowker	37,500	7,509	0.200	A
State Route 98:				
Kloke to SR-111	37,500	26,000	0.693	B
SR-111 to Rockwood	37,500	27,000	0.720	C
Rockwood to Andrade	37,500	25,900	0.691	B
Andrade to Bowker	17,500	9,900	0.566	A

Note: LOS=level of service; ADT=Average daily traffic; V/C = volume to capacity ratio; number rounding may occur in spreadsheet background Source: Darnell and Associates, 2008.

- Jasper Road/Yourman (two-way stop)
- Jasper Road/Meadows Road (two-way stop)
- Jasper Road/Bowker Road (two-way stop)
- Dogwood Road/Cole Road (two-way stop)
- Cole Road/Scaroni Avenue (two-way stop)
- SR-111/Cole Road (signal)
- Cole Road/Yourman (signal)
- Cole Road/Meadows Road (signal)
- Cole Road/Bowker Road (all-way stop)
- SR-98/Cole Road (signal)
- SR-98/Dogwood Road (signal)
- SR-98/SR-111 (signal)
- SR-98/Rockwood Avenue (signal)
- SR-98/Meadows Road (signal)
- SR-98/Bowker Road (two-way stop)

Figures 4.3-3 and 4.3-4 depict the existing intersection conditions north and south, respectively, of the project site.

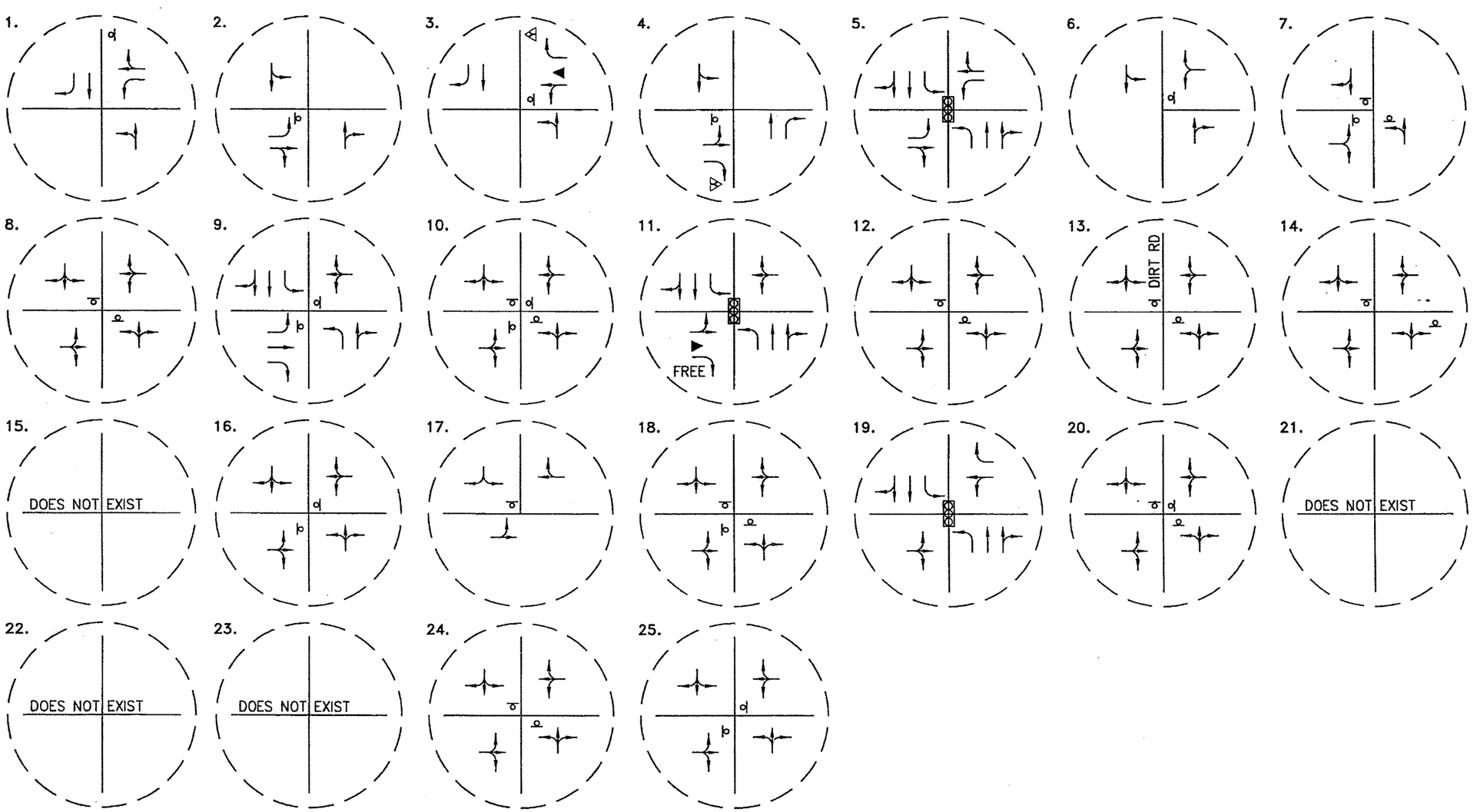
Intersection Traffic Counts

The scope of the analysis for the intersection traffic counts in the traffic study was based on traffic dispersed to the interstate arterials and no numerical threshold was used. The northern study area terminates at I-8. The southern study area ends at SR-98. The eastern boundary was established at Bowker Road. The western boundary was established at Dogwood Road. The SR-111/SR-98 intersection was counted in June 2006, and the Cole Road/Meadows Road and SR-98/Meadows Road intersection were counted in May 2006 by Darnell and Associates. All remaining intersections turn counts were collected in October 2005 by Darnell and Associates. As described above, new count data (Year 2008) reflected lower volumes than 2005-06 data and the higher traffic volumes were utilized to represent worst-case traffic conditions. Figure 4.3-5 shows the intersection volumes for the northern study area, and Figure 4.3-6 depicts the intersection volumes for the southern study area. Count summaries are included in the Traffic Study (Appendix B of this EIR).

Existing Level of Service Conditions

The level of service analysis at intersections is summarized in Table 4.3-2. The following intersections report existing deficiencies:

- I-8 Westbound/Dogwood (LOS F)
- I-8 Eastbound/Dogwood (LOS E)
- Dogwood Road/Heber Road (LOS D)
- Cole Road/Scaroni Avenue (LOS F)
- SR-111/Cole Road (LOS D)
- SR-98/SR-111 (LOS D)



SEE FIGURE 4.3-1 FOR INTERSECTION LOCATIONS

SOURCE: Darnell & Associates, Inc., 2008

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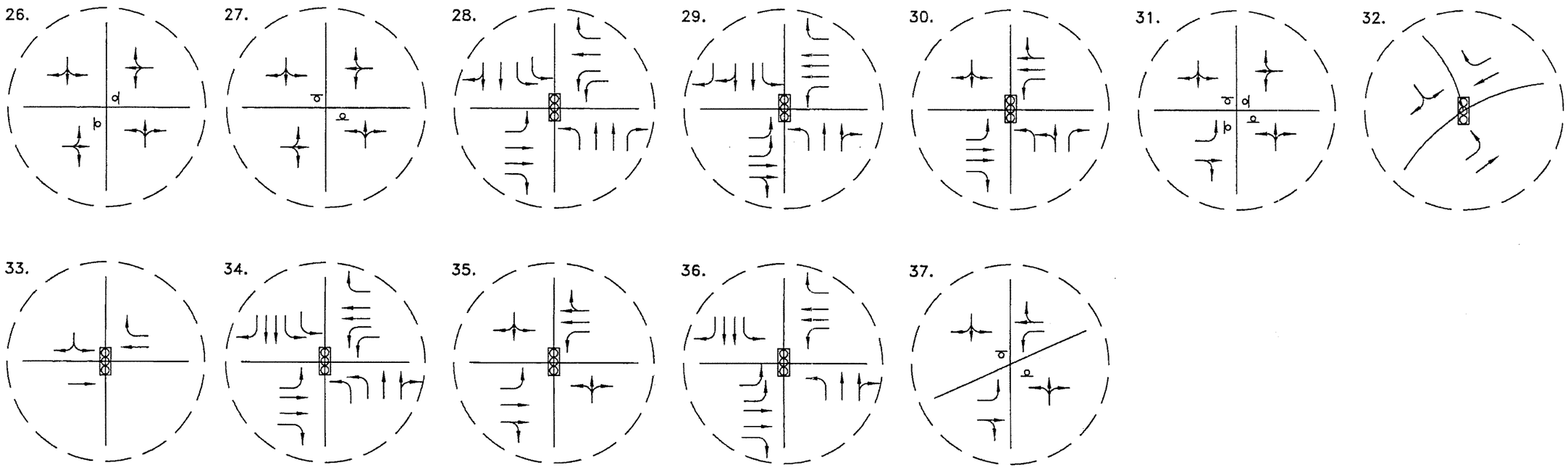
Existing Intersection Conditions - North

FIGURE 4.3-3

F:\projects\634 Calexico\1st Screencheck Draft EIR\Traffic Study Figures\Figure 4.3-3 Existing Intersection Conditions North.ai



LEGEND

— TRAVEL LANE

STOP SIGN

TRAFFIC SIGNAL

N

SEE FIGURE 4.3-1 FOR INTERSECTION LOCATIONS

SOURCE: Darnell & Associates, Inc., 2008

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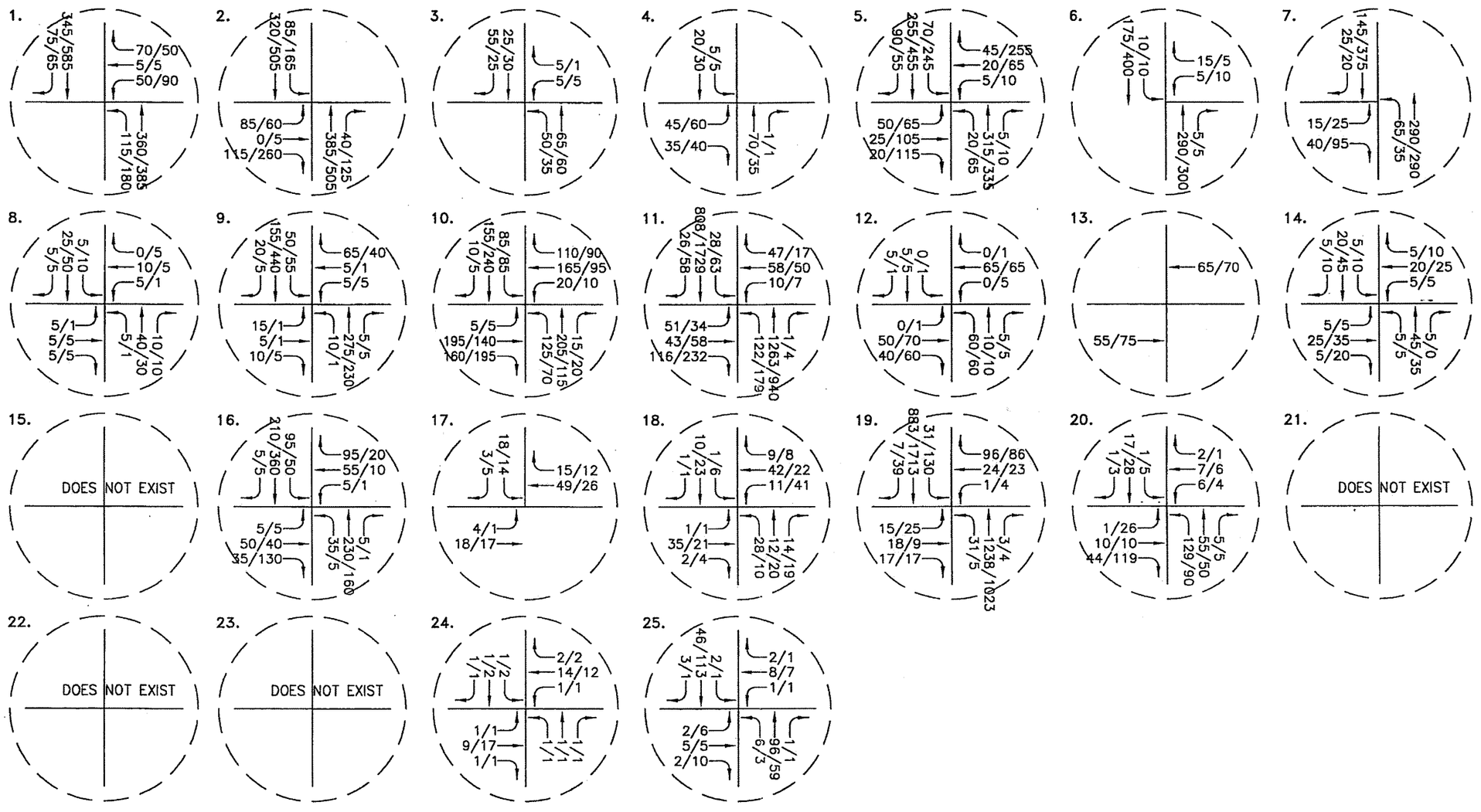
Existing Intersection Conditions - South

FIGURE 4.3-4

F:\projects\634 Calexco\2nd Screencheck Draft EIR\Chapter 4\Figure 4.3-4 Existing Intersection Conditions South.ai



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

——→ – DIRECTION OF TRAVEL

SEE FIGURE 4.3-1 FOR INTERSECTION LOCATIONS

SOURCE: Darnell & Associates, Inc., 2008

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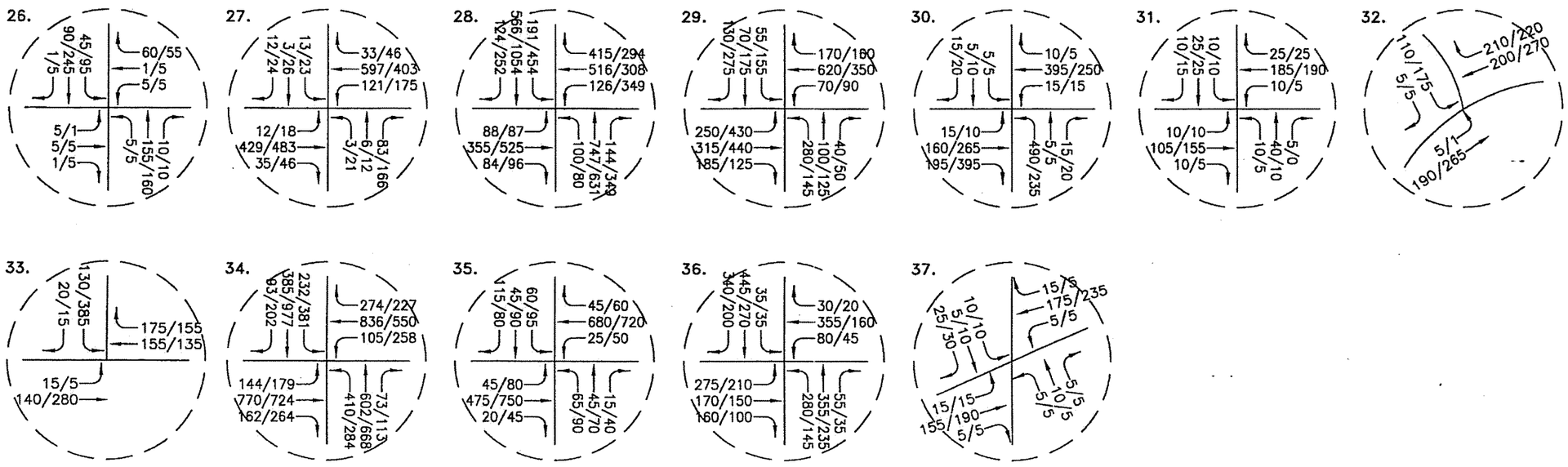
Existing Intersection Traffic Volumes - North

FIGURE 4.3-5

F:\projects\634 Calexico\1st6 Screencheck Draft EIR\Traffic Study Figures\Figure 4.3-5 Existing Intersection Traffic Volumes North.ai



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

——► – DIRECTION OF TRAVEL

SEE FIGURE 4.3-1 FOR INTERSECTION LOCATIONS

SOURCE: Darnell & Associates, Inc., 2008

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Existing Intersection Traffic Volumes - South

FIGURE 4.3-6

F:\projects\634 Calexico\1st Screencheck Draft EIR\Traffic Study Figures\Figure 4.3-6 Existing Intersection Traffic Volumes South.ai

TABLE 4.3-2
Existing Conditions Intersection Operation

Intersection	Movement	Existing Conditions			
		AM PEAK		PM PEAK	
		Delay	LOS	Delay	LOS
I-8 Westbound/Dogwood (TWSC)	WB	19.5	C	130.3	F
I-8 Eastbound/Dogwood (TWSC)	EB	20.7	C	43.6	E
I-8 Westbound/Bowker (TWSC)	WB	9.5	A	9.7	A
I-8 Eastbound/Bowker (TWSC)	EB	9.1	A	9.1	A
Dogwood/Chick (Signal)	Int.	3.5	A	6.9	A
Dogwood/McCabe North (TWSC)	WB	10.7	B	13.7	B
Dogwood/McCabe South (AWSC)	EB	8.2	A	9.5	A
	NB	11.0	B	12.1	B
	SB	8.7	A	13.5	B
McCabe/Bowker (TWSC)	NB	9.4	A	9.2	A
	SB	9.3	A	9.4	A
Dogwood/~~Abatti~~ Corell (TWSC)	EB	14.5	B	12.7	B
	WB	11.6	B	11.0	B
Dogwood/Heber (AWSC)	EB	33.4	D	18.1	C
	WB	25.3	D	13.3	B
	NB	34.8	D	14.2	B
	SB	22.8	C	19.6	C
SR-111/Heber (Signal)	Int.	12.9	B	26.9	C
Heber/Yourman (TWSC)	NB	9.9	A	10.3	B
	SB	9.3	A	10.1	B
Heber/Bowker (TWSC)	NB	9.8	A	10.1	B
	SB	9.6	A	10.1	B
Dogwood/Willoughby (TWSC)	EB	18.0	C	15.4	C
	WB	16.8	C	12.0	B
Jasper/Pitzer (TWSC)	SB	9.0	A	8.8	A
Jasper/Scaroni (AWSC)	EB	7.3	A	7.2	A
	WB	7.4	A	7.6	A
	NB	7.4	A	7.3	A
	SB	7.3	A	7.4	A
Jasper/SR-111 (Signal)	Int.	14.0	B	20.1	C
Jasper/Yourman (TWSC)	NB	10.3	B	11.0	B
	SB	9.5	A	10.4	B
Jasper/Meadows (TWSC)	NB	8.8	A	8.8	A
	SB	8.8	A	8.9	A
Jasper/Bowker (TWSC)	EB	9.9	A	9.8	A
	WB	10.1	B	10.3	B
Dogwood/Cole (TWSC)	EB	12.1	B	13.2	B
	WB	9.8	A	10.7	B
Cole/Scaroni (TWSC)	NB	22.5	C	121.1	F
	SB	114.1	F	343.8	F
SR-111/Cole (Signal)	Int.	38.2	D	42.9	D
Cole/Yourman (Signal)	Int.	33.2	C	32.5	C
Cole/Meadows (Signal)	Int.	24.4	C	14.7	B

TABLE 4.3-2
Existing Conditions Intersection Operation (cont'd.)

Intersection	Movement	Existing Conditions			
		AM PEAK		PM PEAK	
		Delay	LOS	Delay	LOS
Cole/Bowker (AWSC)	EB	7.7	A	8.1	A
	WB	9.2	A	9.1	A
	NB	8.3	A	8.1	A
	SB	8.1	A	8.2	A
SR-98/Cole (TWSC)	SB	6.7	B	7.3	A
SR-98/Dogwood (Signal)	Int.	6.7	A	9.7	A
SR-98/SR-111 (Signal)	Int.	32.0	C	38.6	D
SR-98/Rockwood (Signal)	Int.	11.5	B	17.6	B
SR-98/Meadows (Signal)	Int.	26.7	C	17.2	B
SR-98/Bowker (TWSC)	NB	11.6	B	12.2	B
	SB	10.6	B	11.5	B

Note: Delay is measured in seconds per vehicle; LOS=level of service; AWSC=all way stop; TWSC=two way stop; Int.=intersection; NB=northbound; SB=southbound; EB=Eastbound; WB=Westbound; Delay and LOS calculated using SYNCHRO (with HCS value)

Source: Darnell and Associates, 2008.

Per Caltrans requirements, ILV analysis was also performed for the signalized intersections along SR-111. Table 4.3-3 summarizes the ILV analysis. Under the existing conditions all intersections operate at stable flow conditions or better. The Traffic Study (Appendix B of this EIR) contains the analysis worksheets for the existing level of service conditions.

TABLE 4.3-3
Summary of Existing Intersection Operations
Caltrans Intersecting Lane Volumes (ILV)

Intersection	Existing AM Peak ILV	Existing PM Peak ILV
SR-111/Heber	870	1305
SR-111/Jasper	748	1092
SR-111/Cole	1078	1363
SR-111/SR-98	1105	1134
SR-98/Cole	330	451
SR-98/Dogwood	480	840
SR-98/Rockwood	628	743
SR-98/Meadows/Andrade	936	550

Note: ILV=Intersecting Lane Volumes (CalTrans Methodology); ILV Value = less than 1200 (Free Flow); ILV Value = 1200-1500 (Acceptable Flow); ILV Value = exceeds 1500 (Deficient Flow)

Source: Darnell and Associates, 2008.

4.3.1.3 Transit Service

Imperial Valley Transit (IVT) provides public transit services for Imperial County. The IVT has approximately 15 fixed routes (primary service routes include Brawly, Imperial, El Centro, Heber, and Calexico), Monday through Friday (holidays excluded) from 5:45 AM to 11 PM. The closest stop to the project site is located at the intersection of Cole Road and SR-111 approximately 0.5 miles from the site. In addition, there is an existing transit route between the City of Calexico and the Imperial Valley Mall on Saturdays.

4.3.1.4 Bicycle Facilities

In September 2003, the City of Calexico adopted a Bicycle Master Plan. This Bicycle Master Plan proposed locations for a system of bicycle routes, bicycle facilities, and road improvements. With this document, the City of Calexico aims to connect existing and developing residential areas to commercial, industrial, and recreational areas, as well as to the County of Imperial's planned bicycle paths.

4.3.1.5 Regulatory Setting

A. Congestion Management Program Compliance

The purpose of the state-mandated Congestion Management Plan (CMP) is to monitor roadway congestion and assess the overall performance of the region's transportation system. Based upon this assessment, the CMP contains specific strategies and improvements to reduce traffic congestion and improve the performance of a multi-modal transportation system. Examples of strategies include increased emphasis on public transportation and rideshare programs, mitigating the impacts of new development, and better coordinating land use and transportation planning decisions.

Based on the approval of Proposition 111 in 1990, regulations require the preparation, implementation, and annual updating of a CMP in each of California's urbanized counties. One required element of the CMP is a process to evaluate the transportation and traffic impacts of large projects on the regional transportation system. That process is undertaken by local agencies, project applicants, and traffic consultants through a transportation impact report usually conducted as part of the CEQA project review process. Authority for local land use decisions including project approvals and any required mitigation remains the responsibility of local jurisdictions.

The criteria for which a project is subject to the regulations as set forth in the CMP are determined by the trip generation potential for the project. Currently, the ADT threshold is 2,400 vehicles or 200 peak hour trips. The proposed project would generate approximately 75,308 new total daily trips and is therefore subject to CMP guidelines for traffic impact studies.

B. Destination 2030: 2004 Regional Transportation Plan

Destination 2030 is Southern California Association of Governments (SCAG's) Regional Transportation Plan (RTP) for its member counties. The RTP focuses on improving the balance between land use and current as well as future transportation systems. SCAG develops, maintains and updates the RTP on a three-year cycle. There are no public transit services currently within or on the perimeter of the project area. However, the RTP considers SR-111 from the Mexican border to I-8 a major transportation corridor. The

2004 RTP proposes that the segment of SR-111 from SR-98 to I-8 be upgraded to four lanes by a completion date of 2012.

C. Imperial County General Plan Circulation Element

The Imperial County General Plan Circulation Element provides information about the transportation needs of the county and states objectives and policies to meet those needs. The General Plan Circulation Element also states acceptable LOS for the County of Imperial. Currently, Imperial County deems LOS C or higher the acceptable LOS for intersections and roadway sections. The following policies from the General Plan Circulation Element pertain to the proposed project:

Objective IV.B.1: The goal of the Circulation and Scenic Highway Plan is to provide a network of roadways throughout the County, which is the foundation of the transportation system. The street system is used for vehicular, bicycle, transit, pedestrian, and freight movement. Thus, it is essential to define a hierarchical system in which each roadway functions in a manner consistent with its intended use.

Policy IV.B.1.d: Level of Service Standards

The County's goal for an acceptable traffic service standard during AM and PM peak periods shall be LOS C for all arterial and street links and LOS C for all intersections. These service values are defined in the 1985 edition of the *Highway Capacity Manual* or any subsequent edition thereof. This policy shall acknowledge that the aforementioned level of service standards may not be obtainable on some existing facilities where abutting development precludes acquisition of right-of-way needed for changes in facility classification.

In order to achieve the level of service goals in the previous policy, the County shall develop and institute a long-range funding program in which new land development shall bear the major burden of the associated costs and improvement requirements.

Objective IV.B.5: The ultimate circulation system is not in place at this time, nor is it necessary for it to be fully completed until the County and regional growth warrants it. In general, the road network will be constructed in phases consistent with the needs of the community. This section incorporates policies which will encourage the orderly development and funding of the street system. It is expected that the construction will be funded through a combination of developer contributions and fees, County funds such as gasoline tax, and state and federal subventions.

Policy IV.B.5.b: Policies

- The County shall impose appropriate pro-rated fees for construction of roadway facilities and associated landscaping to ensure that all new development

contributes to the completion of the circulation system. In addition to pre-permit collection, such fees may be imposed through creation of assessment districts.

- The County shall:
  a. Require development to provide collector and local street improvements according to standards of the County Public Works Department.
  b. Require development to dedicate necessary right-of-way when subdivision or development of property adjacent of straddling Circulation and Scenic Highway Plan streets is proposed.
  c. Require development to provide all necessary grading, installation of curbs, gutters, sidewalks, and parkway tree planting, unless these improvements are provided through other means.
  d. Require development to provide half-width street improvements plus 12-feet beyond centerline in accordance with County Standards.

- If the location and traffic generation of a proposed development will result in congestion on major streets or failure to meet LOS C at peak hour periods, or if it creates safety hazards, the proposed development shall be required to make necessary off-site improvements. Such improvements may be eligible for reimbursement from collected impact fees. In some cases, the development may have to wait until financing for required off-site improvements is available. In other cases, where development would result in unavoidable impacts, appropriate findings of overriding consideration would be required to allow temporary undesirable levels of service.

D. City of Calexico General Plan

The City of Calexico General Plan defines traffic congestion using the same LOS system described above. The minimum LOS deemed acceptable by the City of Calexico is LOS C. However, the city will accept LOS D for segments of the roadway, as long as the intersections on the segment operate at LOS C or better. Policies in the Circulation Element section of the General Plan that pertain to this project include the following:

Objective 1: Land use should be planned in conjunction with the circulation so that is does not overburden the City's existing and/or planned circulation system.

Policy 1.a: The City shall establish Level of Service "C" as the minimum acceptable Level of Service. No development project shall be approved that will increase traffic on a planned or existing City street above the street's existing design capacity at Level of Service "C" without adequate mitigation.

Policy 1.e: Commercial, civic uses, schools, and services should be located near enough to residential areas to allow for and encourage pedestrian access.

Objective 6: Pedestrian facilities shall be developed throughout the City to encourage walking as an alternative to the automobile.

Policy 6.a: All urban standard streets should have improved sidewalks on both sides of the road.

Objective 7: Develop a well-designed bicycle network throughout the City that provides for safe and efficient means of transportation and recreation.

Policy 7.b: Encourage cycling by planning accordingly and incorporating bike racks when developing new schools, parks, residential communities, and retail/employment centers.

Objective 9: The financing of expansion to the City circulation system made necessary by development shall be borne by proposal applicants, while the maintenance and improvement of the existing street system shall be borne by the City and its residents.

Policy 9.b: The City shall adopt and implement appropriate fee ordinances, resolutions, financing districts or other mechanisms that require development proposal applicants to build and/or to pay appropriate "fair share" fees for the improvement of the City circulation system. The City shall also require applicants to include their development projects in financing mechanisms created to address maintenance of circulation system facilities.

Objective 10: To create streets, highways, and trails that adds to the positive experience of Calexico by drivers, pedestrians, and cyclists.

Policy 10.d: To enhance impressions of Calexico at places that serve as entry points, or "gateways," to the City (e.g., international border, SR-111 and Jasper Road, SR 98 at Dogwood Road), landscaping and City identification monument signs should be developed at key locations.

4.3.2 Impact Thresholds

For purposes of this EIR, a significant Transportation/Circulation impact would occur if implementation of the proposed project would:

- *Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections);*
- *Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways;*

- *Result in a change in air traffic patterns, including with an increase in traffic levels or a change in location that results in substantial safety risks;*
- *Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);*
- *Result in inadequate emergency access; and/or,*
- *Result in inadequate parking capacity; and/or,*
- *Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).*

To determine the significance of a LOS, the following significance thresholds were used, which are dependent upon whether the roadway segment or intersection is located within the jurisdiction of the City of Calexico or the County of Imperial:

4.3.2.1 Roadway Segment

A. City of Calexico

Based on the City of Calexico criteria, if the project worsens the street segment LOS from LOS C or better to LOS D or worse, the project is considered to be significant. The only exception is if the street segment is operating at LOS D with the project traffic added and all of the intersections along the street segment operate at LOS D or better during peak periods, then the project is not considered to be significant. If the street segment LOS worsens from LOS D to LOS E or F, the impact is considered significant and direct. If the street segment LOS is already LOS E or LOS F without project traffic, the impact is considered to be cumulative.

B. County of Imperial

The County of Imperial requires that all roadways operate at LOS C or better. If the LOS drops below LOS C, impacts are significant and mitigation by the project is required on a fair-share basis.

4.3.2.2 Intersections

A. City of Calexico

Based on the City of Calexico criteria, if the project traffic worsens the level of service at the study intersection from LOS C or better to LOS D or worse, the impact is considered to be significant. If the intersection LOS is already LOS D or worse and the project does not degrade the LOS, the impact is considered to be cumulative. If the project does degrade the LOS, the impact is considered a direct impact.

B. County of Imperial

The County of Imperial requires that all intersections operate at a LOS C or better. If the LOS drops below LOS C, impacts are significant and mitigation by the project is required on a fair-share basis.

4.3.3 Impact Analysis

The proposed project is a primarily commercial highway development with a casino facility component. The project would be constructed in five phases. For purposes of the traffic analysis, the phases were assumed to be:

Casino Phase includes a 93,880 square foot gaming facility and internal related assembly space, retail and restaurant services, as well as a 200-room hotel.

Phase 1 includes the near term development of approximately 356,000 square feet of retail space (not part of the casino facility), and approximately 100,000 square feet of quality restaurant use (not part of the casino facility).

Total Project (All Phases) includes the development of the entire project, which is the following:

- Casino – 93,880 square feet
- Casino Hotel – 200 rooms
- Hotel – 200 rooms
- Retail – 411,000 square feet
- Restaurant with Drive Through – 10,000 square feet
- Quality Restaurant – 100,000 square feet
- Office – 395,000 square feet
- Office Tech – 340,000 square feet

4.3.3.1 Project Trip Generation

Trip generation potential for the project are based on daily and peak hour trip generation rates obtained from the *(Not So) Brief Guide of Traffic Generation for the San Diego Region* published by the San Diego Association of Governments (SANDAG) in April 2002. Utilizing the SANDAG rates and the characteristics of the proposed project, estimates of daily and peak hour traffic volumes generated by the project can be calculated. As described below, the trip generations were identified for the three phases of the project: Casino Phase, Phase 1, and Total Project (All Phases).

A. Casino Phase

Currently, SANDAG does not identify a specific trip generation rate for a casino use. Therefore, as discussed in the Traffic Impact Study, the trip generation rate was determined based on the rate that is being used for other casino projects traffic studies throughout California. For the purposes of determining the trip generation, the casino ancillary uses are considered part of the 100 trips per 1,000 square feet of gaming space. The hotel was added as a separate land use at eight trips per room. As such, the Casino Phase will generate approximately 10,988 ADT. Table 4.3-4 summarizes the trip generation rates and volumes for the Casino Phase.

TABLE 4.3-4
Trip Generation Summary – Casino Phase

Trip Generation Rates									
Phase	Land Use			Daily	AM Peak Hour			PM Peak Hour		
					% of Daily	% In	% Out	% of Daily	% In	% Out
Casino Phase	Casino			100	1	90	10	6.77	3.95	2.82
	Hotel (Casino)			8	5	60	40	7	40	60
Trip Generation Calculations										
Phase	Land Use	Density	Unit	Daily	AM Peak Hour			PM Peak Hour		
					Total	In	Out	Total	In	Out
Casino Phase	Casino	93.88	KSF	9,388	94	84	9	636	371	265
	Hotel	200	Rooms	1,600	80	48	32	112	45	67
			PHASE TOTAL	**10,988**	**174**	**132**	**41**	**748**	**416**	**332**
TOTALS CASINO PHASE				**10,988**	**174**	**132**	**41**	**748**	**413**	**332**

Notes: KSF = Thousand Square Feet
Source: Darnell & Associates, Inc., 2008

B. Phase 1

The development of Phase 1 of the project would generate approximately 38,880 ADT. When added with the Casino Phase, the Casino and Phase 1 would generate approximately 49,468ADT. Table 4.3-5 summarizes the trip generation rates and volumes for the Phase 1 and Casino Phase.

C. Total Project (All Phases)

As summarized in Table 4.3-6, the total project (all phases) will generate approximately 75,308 ADT.

D. Net New Project Trips

Since the proposed project is a mixed-use development project, a portion of the traffic generated by the project is considered to be pass-by trips. A pass by trip is any trip that is already on the road and stops at the development site before continuing on its journey. The pass by reduction eliminates the double-counting of vehicles already on the roadway system. Pass by reduction are used only at off-site intersections and not at the project driveways. Additionally, a mixed use development has a percentage of "internal capture" traffic which is traffic which enters the site and utilizes more than one use (i.e., retail, office, restaurant, etc.). The internal capture also eliminates unnecessary double counting of traffic on the external street system.

The resulting "net new" project trips (external trips on the circulation system roadways) are summarized in Table 4.3-7. Pass-by/external traffic reductions for each land use are shown in Table 4.3-7. As such, when subtracting the pass-by/external traffic, the new total trips that the project will add to the external roadway network under project buildout conditions is 59,285 ADT, 3,286 ADT AM peak hour trips and 6,071 ADT PM peak hour trips.

4.3.3.2 Trip Distribution/Trip Assignment

The trip distribution percentages for the project were based on the local and regional destinations for the trip purposes (i.e., the availability of shopping, schools, and employment). The trip distribution percentages are depicted in Figure 4.3-7.

A. Casino Phase

The traffic generated by the Casino-only (with hotel) phase of the project was assigned to the roadways and intersections based on the trip percentages shown in Figure 4.3-7. The project related daily traffic volumes for the Casino phase is depicted in Figure 4.3-8. The intersection peak hour volumes for the Casino phase are depicted on Figure 4.3-9 for the northern study area and Figure 4.3-10 for the southern study area. It should be noted that with the development of the Casino Only phase, the project traffic destined for southern destinations will utilize Scaroni Road and Sate Route 111 as the Sunset Road extension is not required with the Casino Phase.

B. Casino Phase Plus Phase 1

The project related daily traffic volumes for the Casino phase plus Phase 1 are shown on Figure 4.3-11. The intersection peak hour volumes for the Casino phase plus Phase 1 is depicted on Figure 4.3-12 for the northern study area and Figure 4.3-13 for the southern study area.

TABLE 4.3-5
Trip Generation Summary – Casino Phase + Phase 1

Trip Generation Rates									
Phase	Land Use			Daily	AM Peak Hour			PM Peak Hour		
					% of Daily	% In	% Out	% of Daily	% In	% Out
Phase 1	Retail			80	4	60	40	10	50	50
	Restaurant - Quality			100	1	60	40	8	70	30
Casino Phase	Casino			100	1	90	10	6.77	3.95	2.82
	Hotel (Casino)			8	5	60	40	7	40	60
Trip Generation Calculations										
Phase	**Land Use**	**Density**	**Unit**	**Daily**	**AM Peak Hour**			**PM Peak Hour**		
					Total	**In**	**Out**	**Total**	**In**	**Out**
Phase 1	Retail	356	KSF	28,400	1,139	684	456	2,848	1,424	1,424
	Restaurant-Quality	100	KSF	10,000	100	60	40	800	560	240
			PHASE TOTAL	**34,480**	**1,239**	**744**	**496**	**3,648**	**1,984**	**1,664**
Casino Phase	Casino	93.88	KSF	9,388	94	84	9	636	371	265
	Hotel	200	Rooms	1,600	80	48	32	112	45	67
			PHASE TOTAL	**10,988**	**174**	**132**	**41**	**748**	**416**	**332**
TOTALS PHASE I +A				**49,468**	**1,413**	**876**	**537**	**4,396**	**2,400**	**1,996**

Notes: KSF = Thousand Square Feet
Source: Darnell & Associates, Inc., 2008

TABLE 4.3-6
Trip Generation Summary – Total Project
(All Phases)

Trip Generation Rates

Phase	Land Use	Daily	AM Peak Hour			PM Peak Hour		
			% of Daily	% In	% Out	% of Daily	% In	% Out
Total Project (All Phases)	Retail	80	4	60	40	10	50	50
	Restaurant w/Drive Thru	650	7	50	50	7	50	50
	Restaurant-Quality	100	1	60	40	8	70	30
	Casino	100	1	90	10	6.77	3.95	2.82
	Hotel (Casino)	8	5	60	40	7	40	60
	Hotel	8	5	60	40	7	40	60
	Office	20	14	90	10	13	20	80
	Office Tech	16	12	80	20	12	20	80

Trip Generation Calculations

Phase	Land Use	Density	Unit	Daily	AM Peak Hour			PM Peak Hour		
					Total	In	Out	Total	In	Out
Total Project (All Phases)	Retail	411.00	KSF	32,880	1,315	789	526	3,288	1,644	1,644
	Restaurant w/Drive Thru	10.00	KSF	6,500	455	228	228	455	228	228
	Restaurant-Quality	100.00	KSF	10,000	100	60	40	800	560	240
	Casino	93.88	KSF	9,388	94	84	9	636	371	265
	Hotel (Casino)	200.00	Rooms	1,600	80	48	32	112	45	67
	Hotel	200.00	Rooms	1,600	80	48	32	112	45	67
	Office	395.00	KSF	7,900	1,106	995	111	1,027	205	822
	Office Tech	340.00	KSF	5,440	653	522	131	653	131	522
TOTAL ON-SITE TRAFFIC				**75,308**	**3,883**	**2,775**	**1,108**	**7,082**	**3,228**	**3,854**

Notes: KSF = Thousand Square Feet
Source: Darnell & Associates, Inc., 2008

TABLE 4.3-7
Trip Generation Summary – Total Project
(All Phases) – with Internal/Pass-by Applied

Trip Generation Rates									
Phase	Land Use	External Traffic[a]	Daily	AM Peak Hour			PM Peak Hour		
				% of Daily	% In	% Out	% of Daily	% In	% Out
Total Project (All Phases)	Retail	78	80	4	60	40	10	50	50
	Restaurant w/Drive Thru	51	650	7	50	50	7	50	50
	Restaurant-Quality	51	100	1	60	40	8	70	30
	Casino	100	100	1	90	10	6.77	3.95	2.82
	Hotel (Casino)	58	8	5	60	40	7	40	60
	Hotel	98	8	5	60	40	7	40	60
	Office	100	20	14	90	10	13	20	80
	Office Tech	100	16	12	80	20	12	20	80

Primary Trip Generation Calculations									
Phase	Land Use	Density	Unit	Daily	AM Peak Hour			PM Peak Hour		
					Total	In	Out	Total	In	Out
Total Project (All Phases)	Retail	411.00	KSF	25,646	1,026	616	410	2,302	1,151	1,151
	Restaurant w/Drive Thru	10.00	KSF	3,315	232	116	116	751	376	376
	Restaurant-Quality	100.00	KSF	5,100	51	31	20	528	370	158
	Casino	93.88	KSF	9,388	94	84	9	636	371	265
	Hotel (Casino)	200.00	Rooms	928	46	28	19	65	26	39
	Hotel	200.00	Rooms	1,568	78	47	31	110	44	66
	Office	395.00	KSF	7,900	1,106	995	111	1,027	205	822
	Office Tech	340.00	KSF	5,440	653	522	131	653	131	522
TOTAL PRIMARY TRAFFIC				**59,285**	**3,286**	**2,439**	**847**	**6,071**	**2,673**	**3,398**

Notes: (a) = External traffic based on pass-by rates
KSF = Thousand Square Feet
Source: Darnell & Associates, Inc., 2008

C. Total Project (All Phases)

With buildout of the project (assumed for the year 2015 condition), all project phase traffic is assigned to the roadway network as depicted in Figure 4.3-14 (for daily traffic), Figure 4.3-15 (intersections on the north) and Figure 4.3-16 (intersections on the south).

4.3.3.3 Near Term Traffic Conditions

The scenarios analyzed below are an assessment of the impact of the Casino Phase, Phase 1, and Total Project (All Phases) traffic volumes in relation to the existing conditions. The analysis includes roadway segments, intersections, and Caltrans ILV.

A. Existing Plus Casino Phase

The Casino project traffic (10,988 ADT), which was assumed to occur in the near term was added to the existing traffic volumes. The daily traffic volumes for the existing plus project (Casino only) condition is depicted in Figure 4.3-17. The intersection peak hour volumes for this condition are depicted in Figure 4.3-18 for the northern study area and Figure 4.3-19 for the southern study area.

Roadway Segments

The roadway segments were analyzed with the project traffic (Casino only) added to the existing traffic volumes. As identified in Table 4.3-8, with the addition of the Casino Phase project traffic, the proposed project would not result in any significant direct impacts. However, the addition of the Casino Phase project traffic will result in significant cumulative impacts to the following roadway segments that are discussed in detail in Section 5.0 Cumulative Impacts of this EIR. All other roadway segments will operate at a LOS C or better.

- Dogwood Road: North of I-8;
- SR-111: South of SR-98; and,
- Cole Road: Enterprise to SR-111.

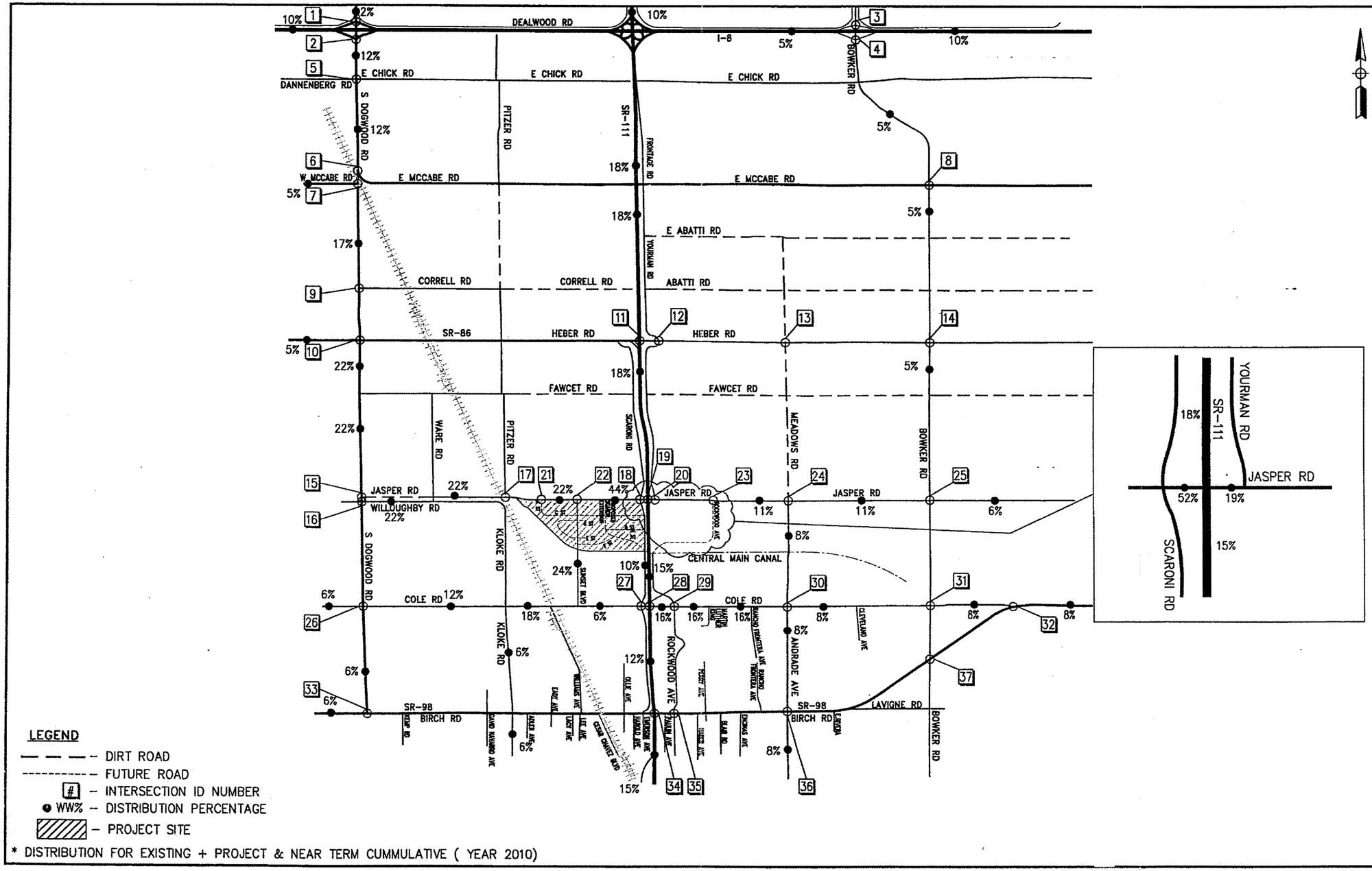
Intersections

Intersection operation for the existing conditions plus the Casino Phase project traffic is summarized in Table 4.3-9. With the addition of the Casino Phase project, the proposed project would have a direct impact on the following intersection during the PM Peak Hour:

- Jasper Road/SR-111 (signal).

The project impact to this intersection is considered a significant impact. Implementation of Mitigation Measure T1, which requires an eastbound left turn lane at the Jasper Road/SR-111 intersection, will reduce the impact to this intersection to a level less than significant. No direct impacts are identified to intersections during the AM Peak Hour.

In addition, the addition of the Casino Phase project traffic will result in significant cumulative impacts to the following intersections that are discussed in detail in Section 5.0 Cumulative Impacts of this EIR:



LEGEND

- DIRT ROAD
- FUTURE ROAD
- # – INTERSECTION ID NUMBER
- WW% – DISTRIBUTION PERCENTAGE
- PROJECT SITE

* DISTRIBUTION FOR EXISTING + PROJECT & NEAR TERM CUMMULATIVE (YEAR 2010)

SOURCE: Darnell & Associates, Inc., 2008

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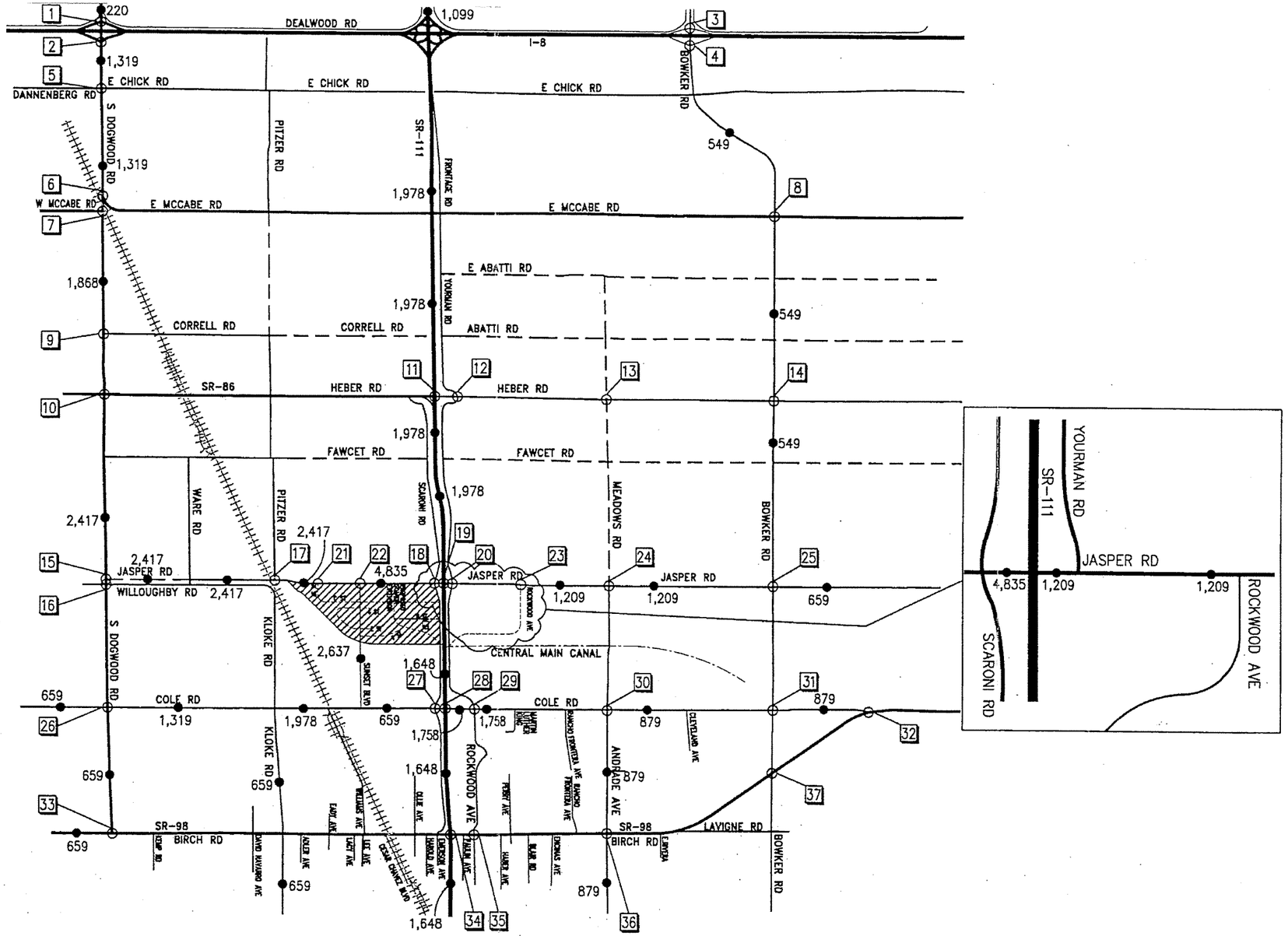
Near Term Project Distrubution

FIGURE 4.3-7

F:\projects\634 Calexicc\1st Screencheck Draft EIR\Traffic Study Figures\Figure 4.3-7 Near Term Project Distribution.ai



SOURCE: Darnell & Associates, Inc., 2008

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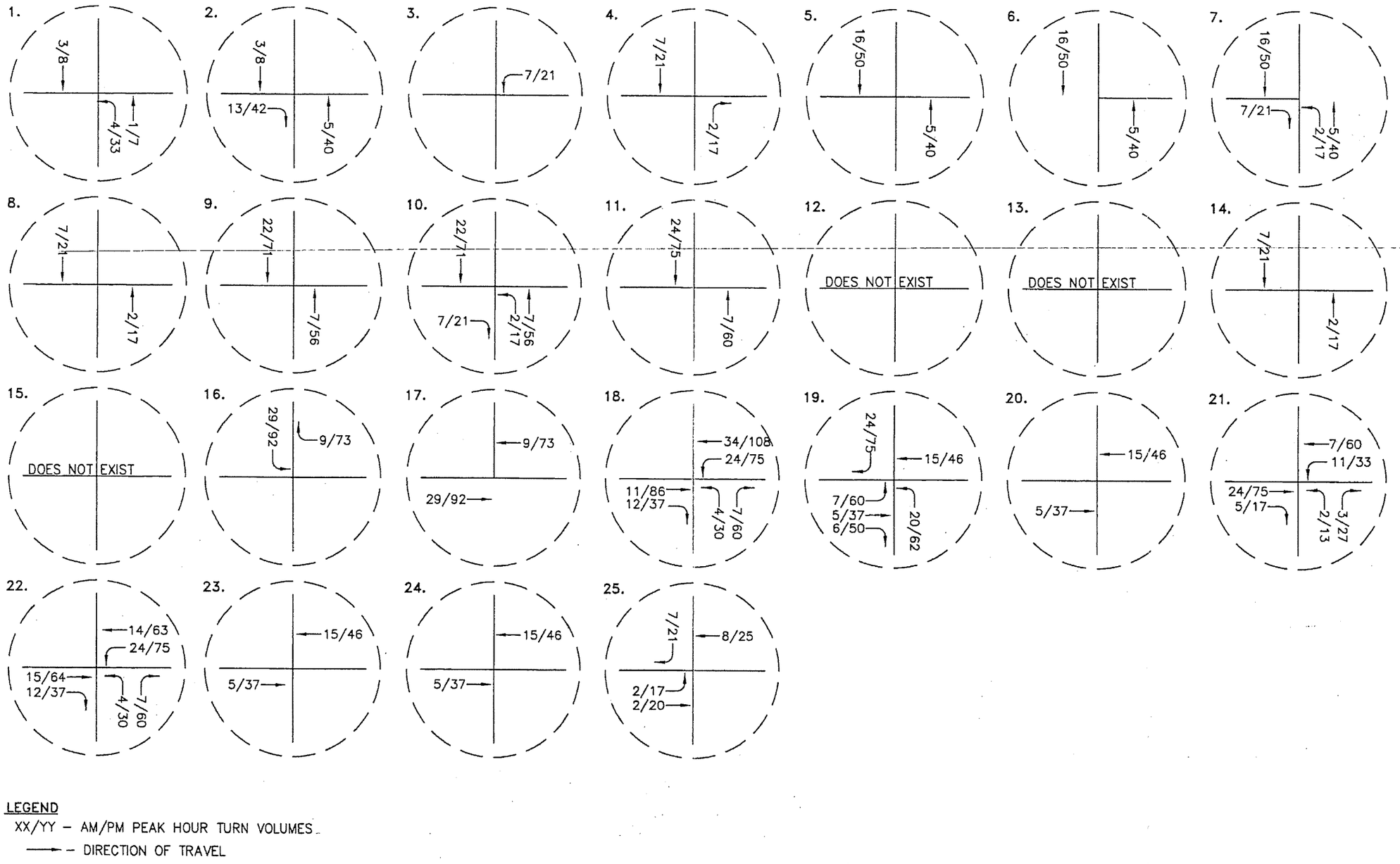
Near Term (Casino Phase) Project Daily Traffic Volumes

FIGURE 4.3-8

F:\projects\634 Calexico\2nd Screencheck Draft EIR\Chapter 4\Figure 4.3-8 Near Term (Casino Phase) Project Daily Traffic Volumes.ai



SOURCE: Darnell & Associates, Inc., 2008

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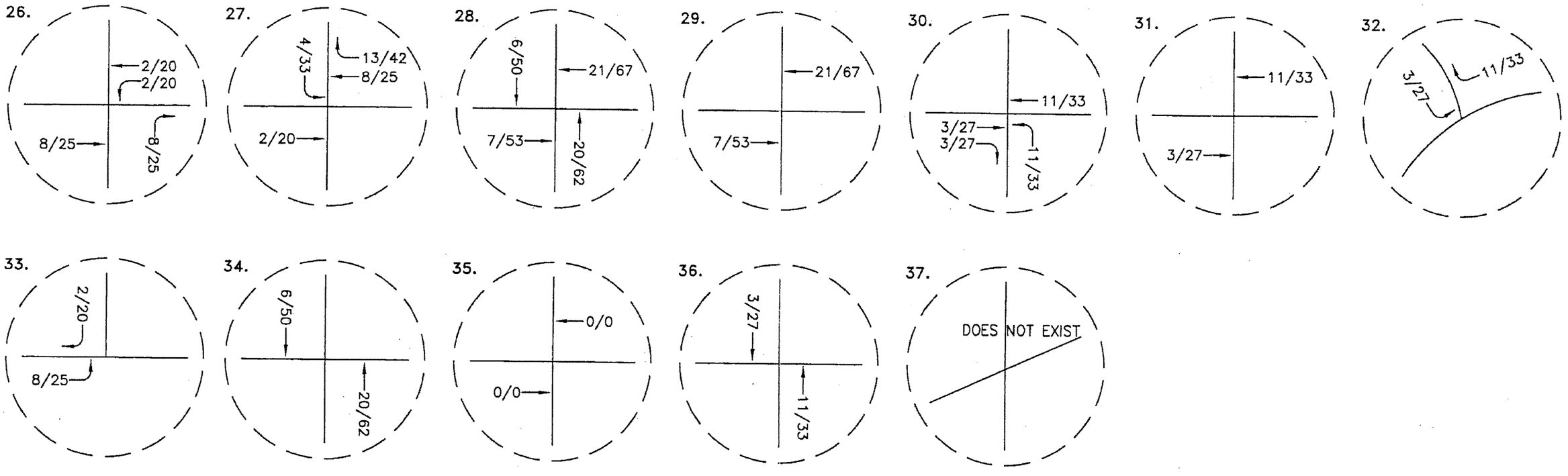
Near Term (Casino Phase) Project Intersection Traffic Volumes - North

FIGURE 4.3-9

F:\projects\634 Calexico\2nd Screencheck Draft EIR\Chapter 4\Figure 4.3-9 Near Term (Casino Phase) Project Intersection Traffic Volumes North.ai



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

N

SOURCE: Darnell & Associates, Inc., 2008

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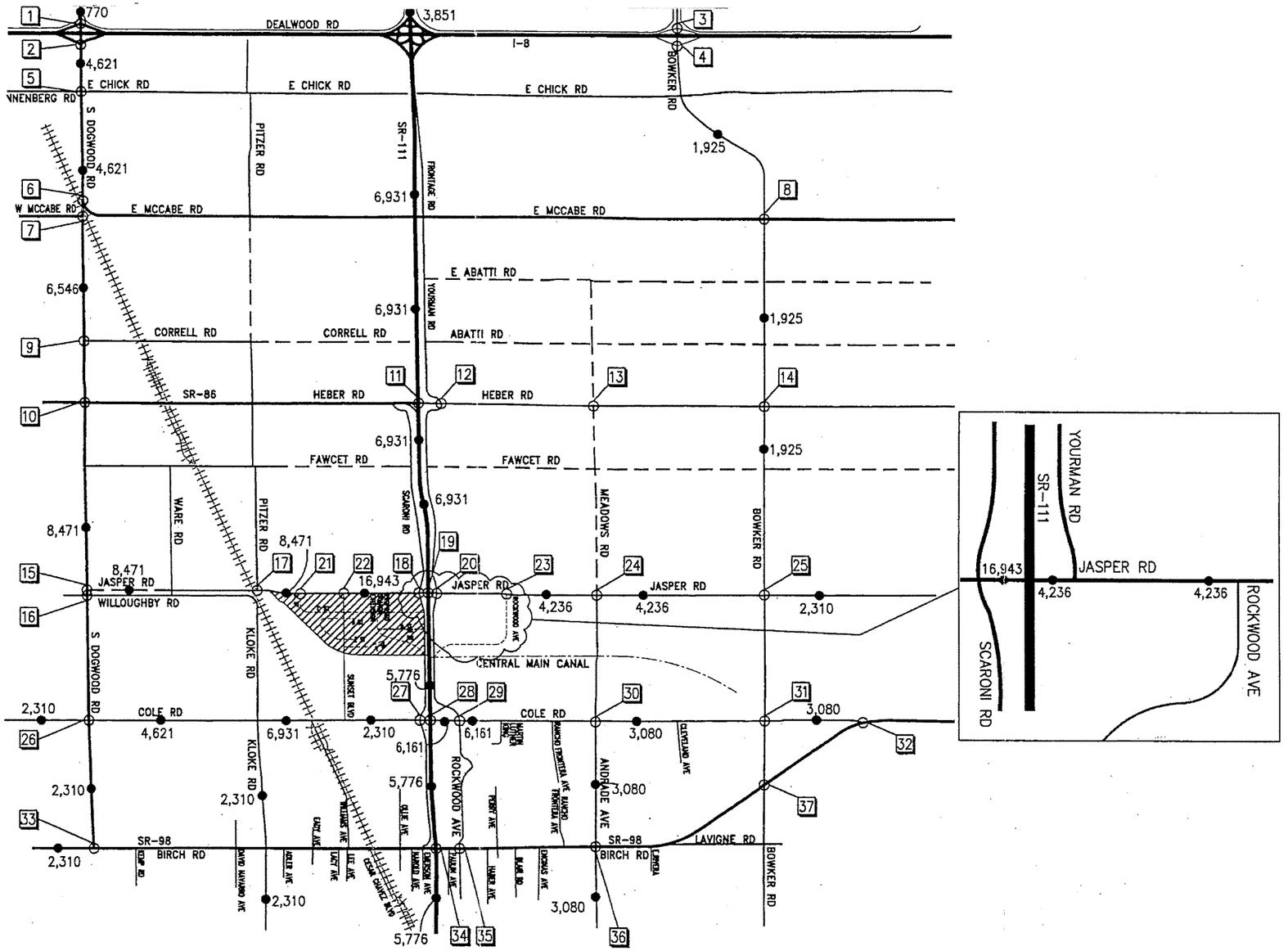
Near Term (Casino Phase) Project Intersection Traffic Volumes - South

FIGURE 4.3-10

F:\projects\634 Calexico\2nd Screencheck Draft EIR\Chapter 4\Figure 4.3-10 Near Term (Casino Phase) Project Intersection Traffic Volumes South.ai



SOURCE: Darnell & Associates, Inc., 2008

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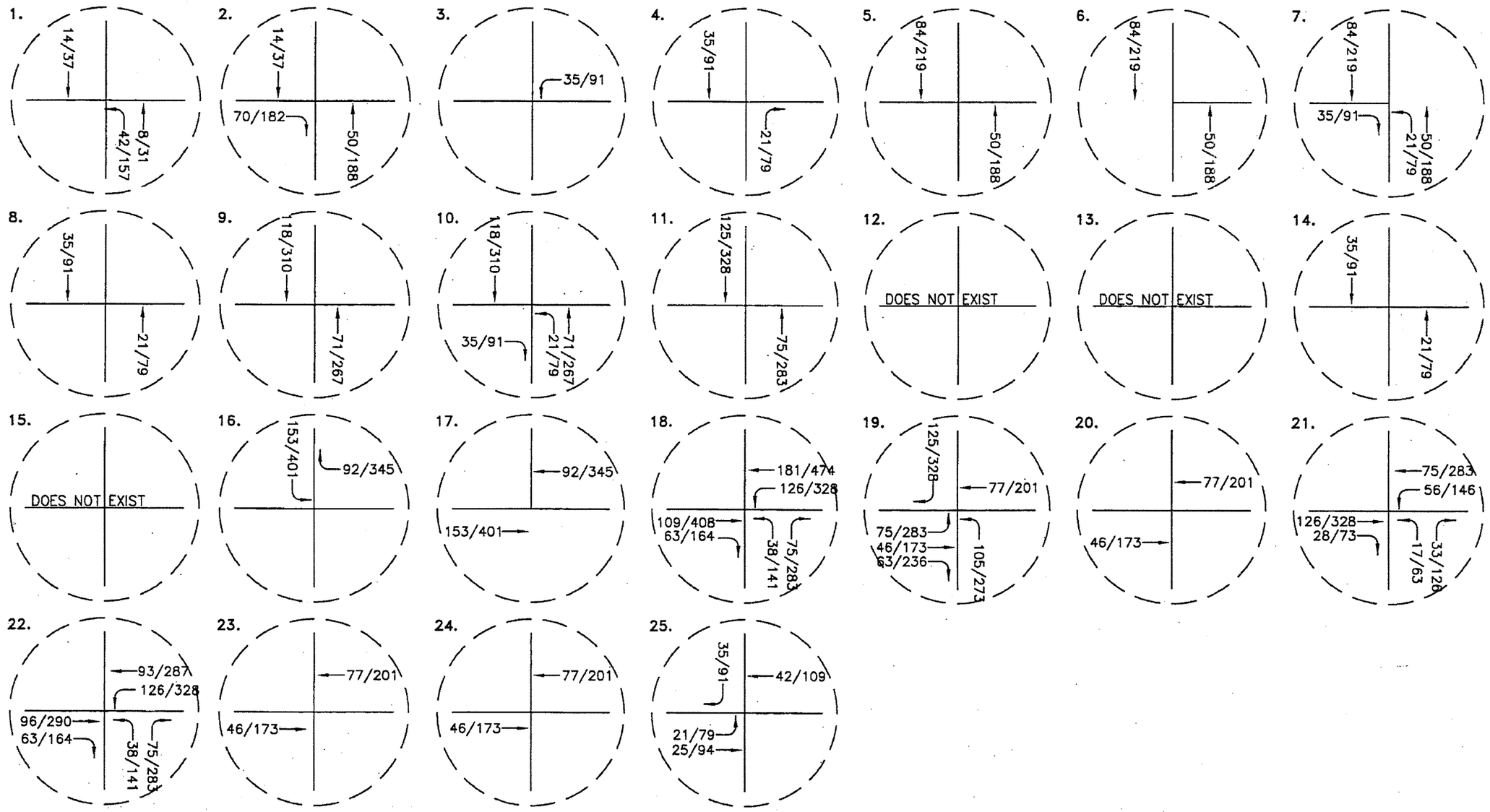
Near Term (Casino Phase + Phase 1) Project Daily Traffic Volumes

FIGURE 4.3-11

F:\projects\634 Calexico\2nd Screencheck Draft EIR\Chapter 4\Figure 4.3-11 Near Term (Casino Phase + Phase 1) Project Daily Traffic Volumes.ai



SOURCE: Darnell & Associates, Inc., 2008

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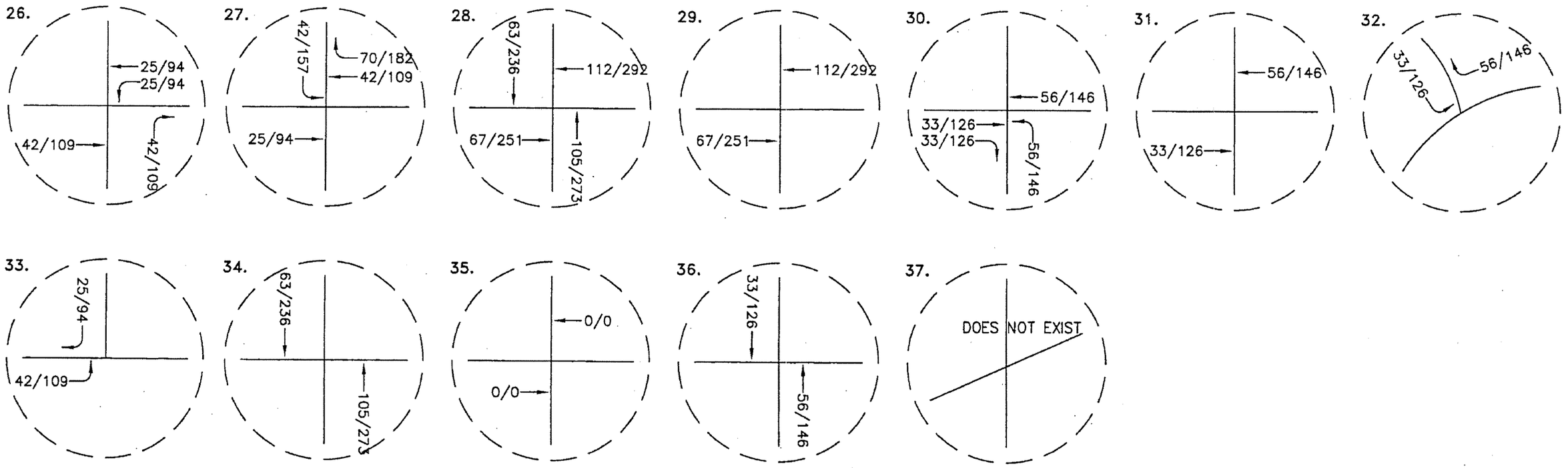
Near Term (Casino Phase + Phase 1) Project Intersection Traffic Volumes - North

FIGURE 4.3-12

F:\projects\634 Calexico\2nd Screencheck Draft EIR\Chapter 4\Figure 4.3-12 Near Term (Casino Phase + Phase 1) Project Intersection Traffic Volumes North.ai



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

N

SOURCE: Darnell & Associates, Inc., 2008

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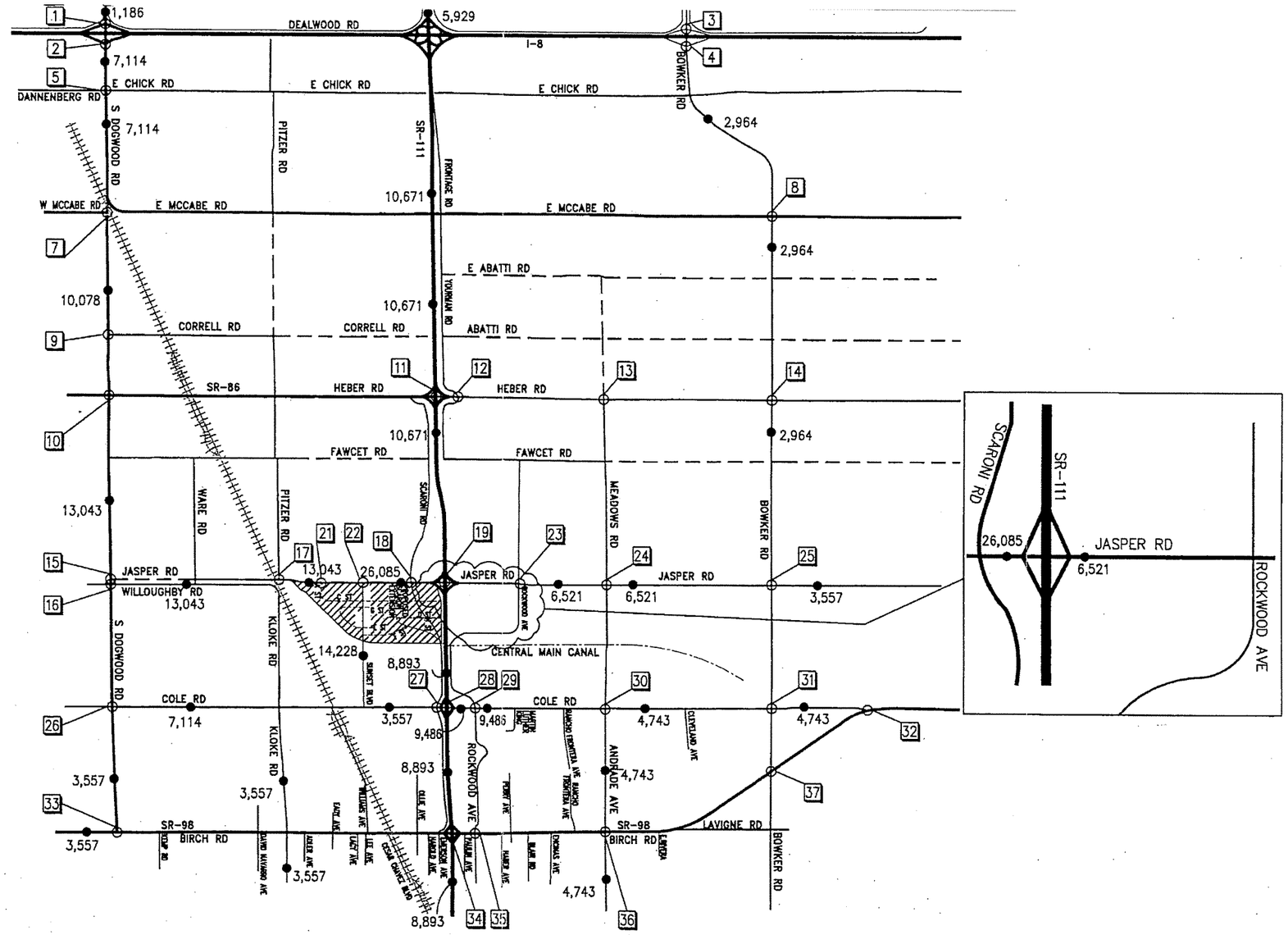
Near Term (Casino Phase + Phase 1) Project Intersection Traffic Volumes - South

FIGURE 4.3-13

F:\projects\634 Calexico\2nd Screencheck Draft EIR\Chapter 4\Figure 4.3-13 Near Term (Casino Phase + Phase 1) Project Intersection Traffic Volumes South.ai



LEGEND

- DIRT ROAD
- FUTURE ROAD
- # – INTERSECTION ID NUMBER
- Z,ZZZ – AVERAGE DAILY TRAFFIC
- PROJECT SITE

N

SOURCE: Darnell & Associates, Inc., 2008

9/2/08

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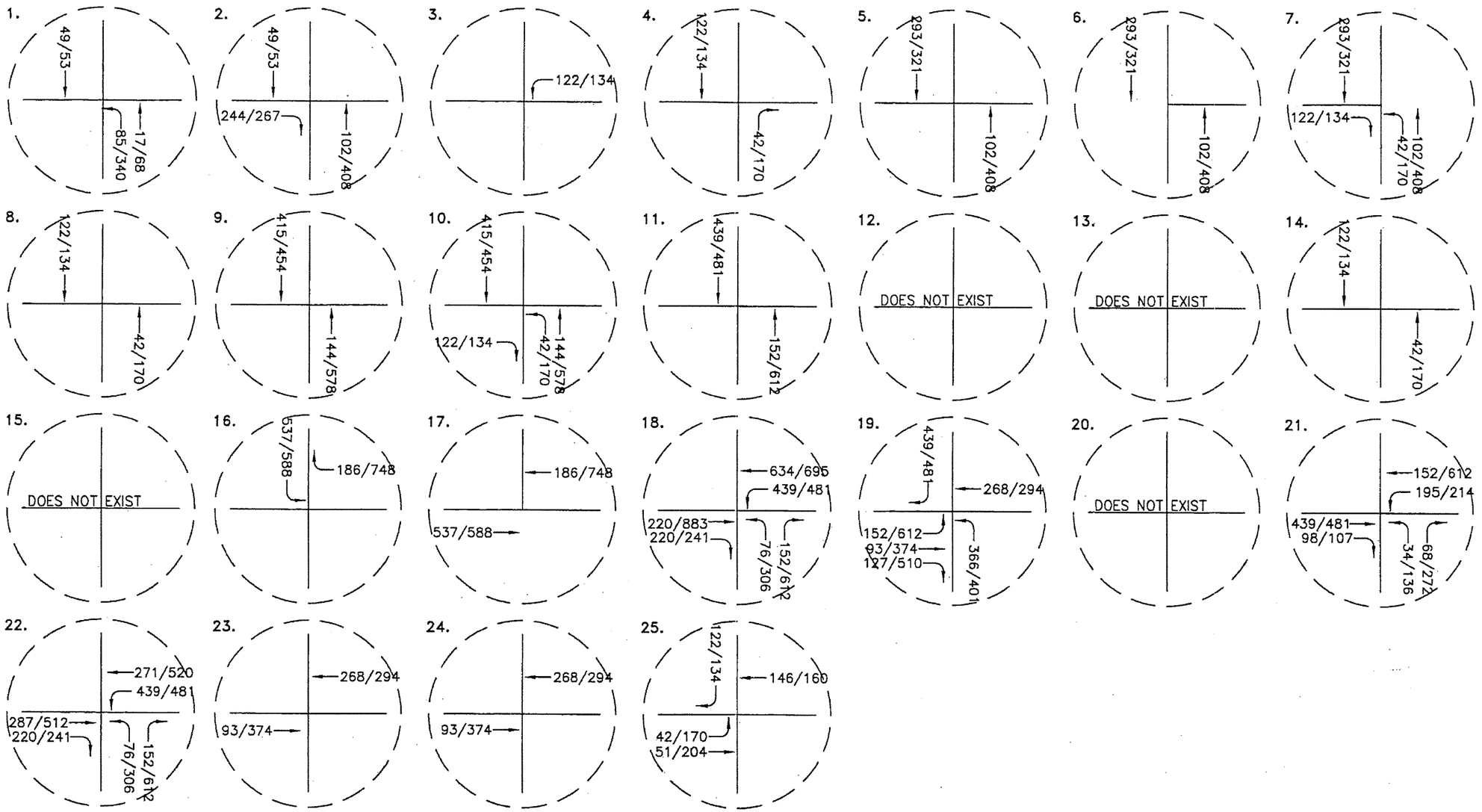
2015 (All Phases) Project Daily Traffic Volumes

FIGURE 4.3-14

F:\projects\634 Calexico\2nd Screencheck Draft EIR\Chapter 4\Figure 4.3-14 2015 (All Phases) Project Daily Traffic Volumes.ai



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

* VOLUMES USED FOR YEAR 2015 CONDITIONS.

N

SOURCE: Darnell & Associates, Inc., 2008

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2015 (All Phases) Project Intersection Traffic Volumes - North

FIGURE 4.3-15

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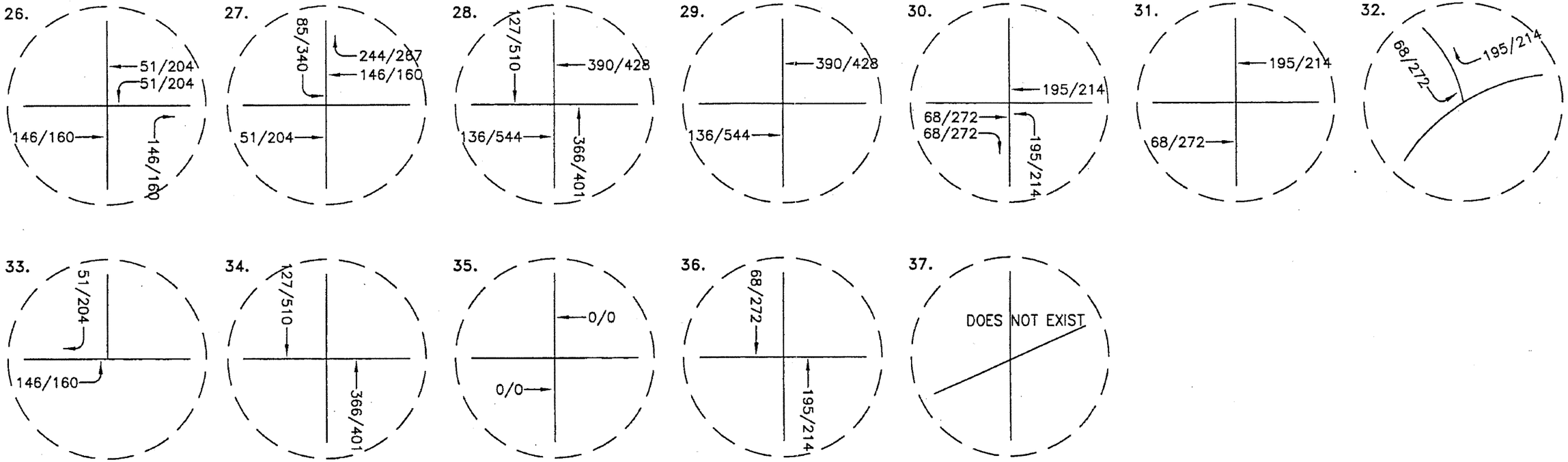

LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

* VOLUMES USED FOR YEAR 2015 CONDITIONS.

N

SOURCE: Darnell & Associates, Inc., 2008

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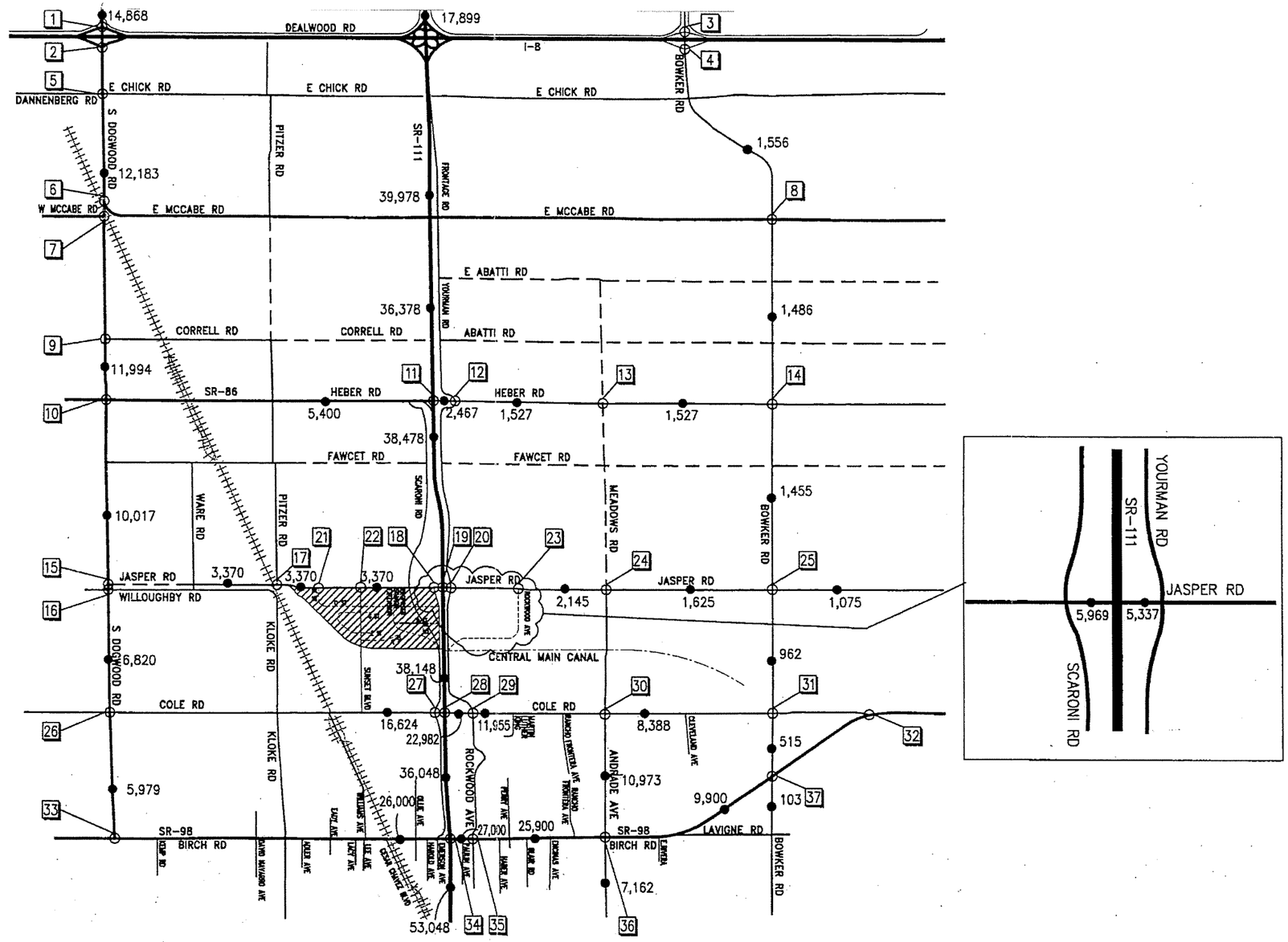
2015 (All Phases) Project Intersection Traffic Volumes - South

FIGURE 4.3-16

F:\projects\634 Calexico\2nd Screencheck Draft EIR\Chapter 4\Figure 4.3-16 2015 (All Phases) Project Intersection Traffic Volumes South.ai



LEGEND

- DIRT ROAD
- FUTURE ROAD
- # – INTERSECTION ID NUMBER
- Z,ZZZ – AVERAGE DAILY TRAFFIC
- PROJECT SITE

N

SOURCE: Darnell & Associates, Inc., 2008

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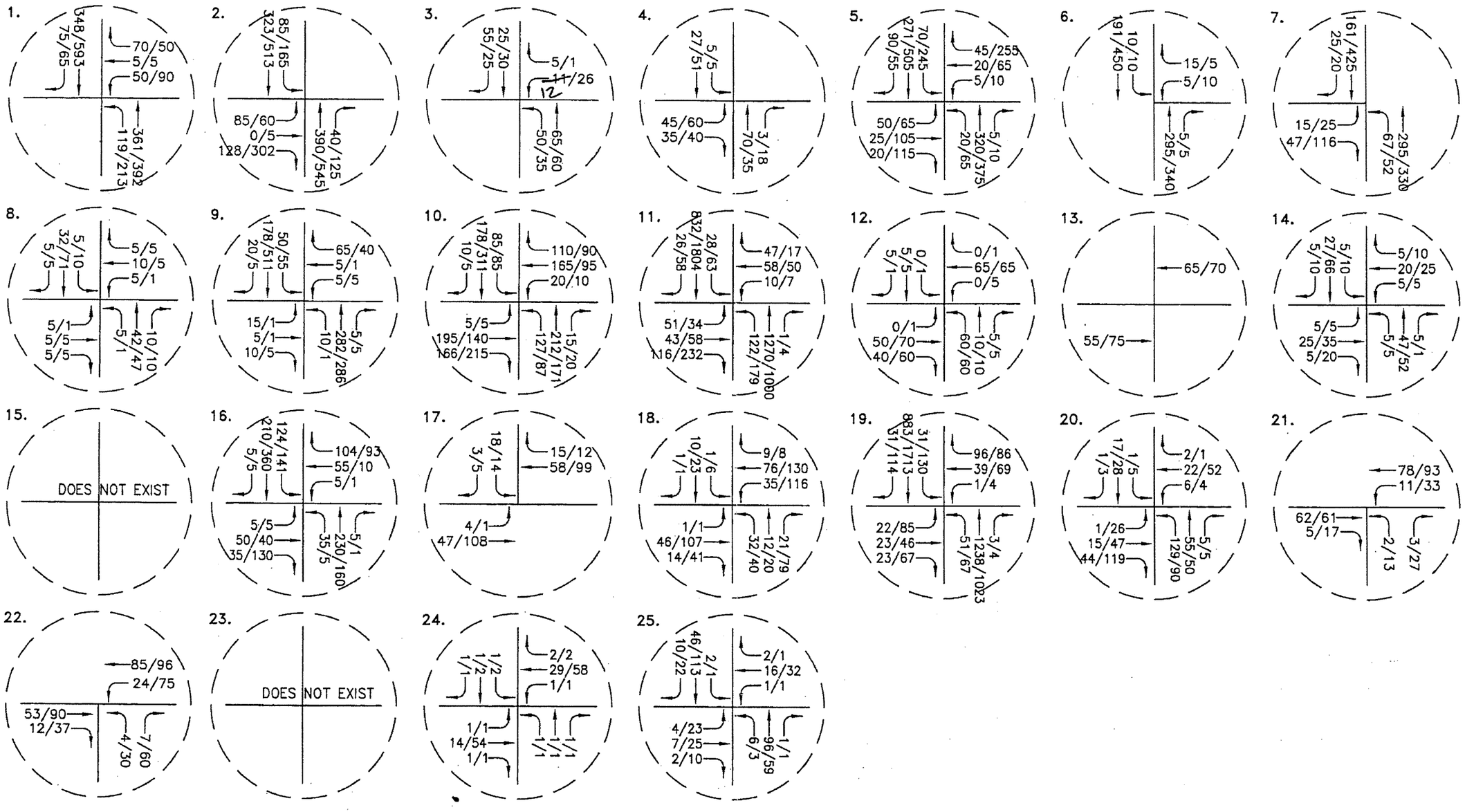
Existing + Project (Casino Phase) Daily Traffic Volumes

FIGURE 4.3-17

F:\projects\634 Calexico\2nd Screencheck Draft EIR\Chapter 4\Figure 4.3-17 Existing + Project (Casino Phase) Daily Traffic Volumes.ai



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

N

SOURCE: Darnell & Associates, Inc., 2008

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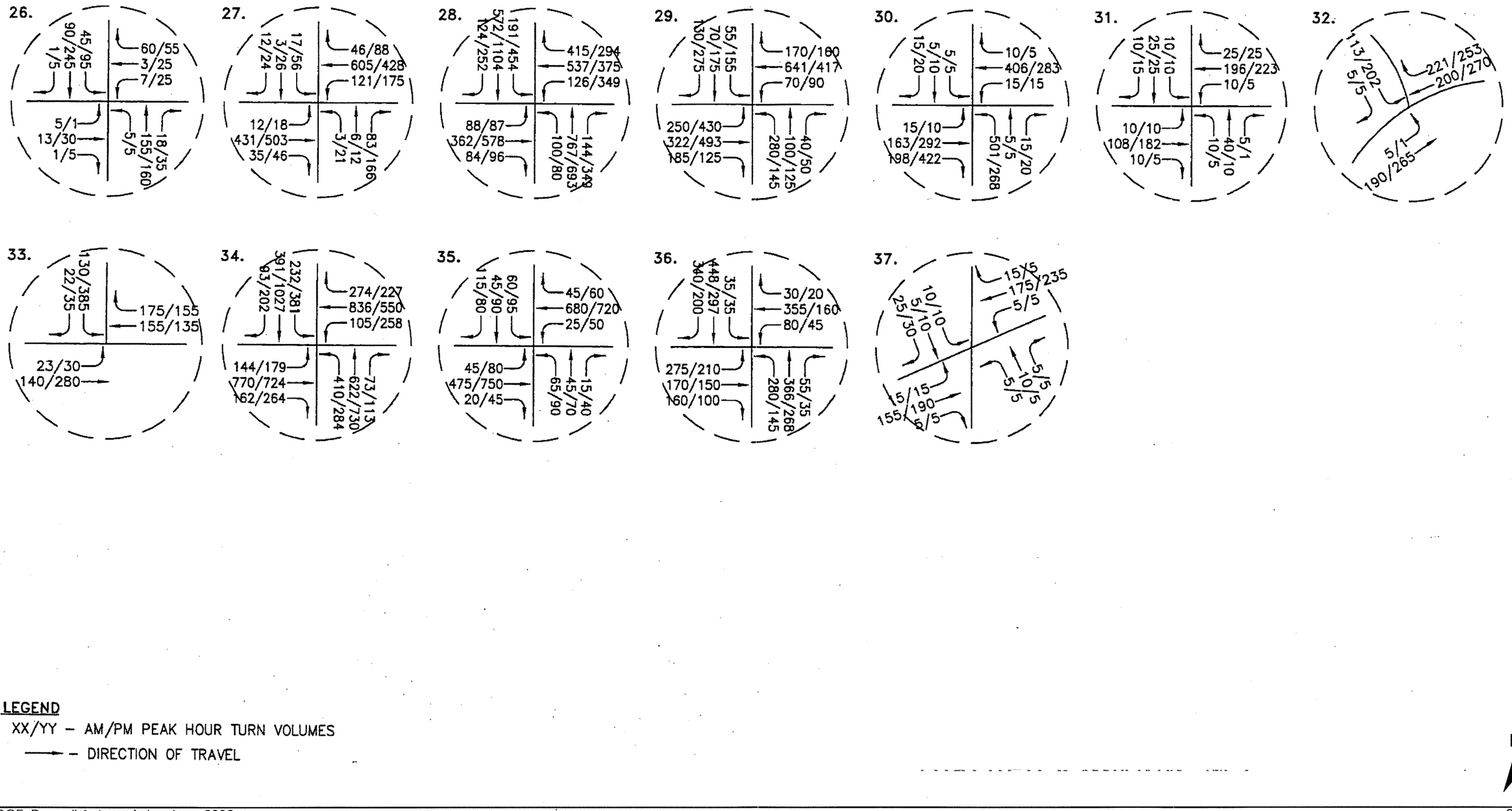
Existing + Project (Casino Phase) Intersection Traffic Volumes - North

FIGURE 4.3-18

F:\projects\634 Calexico\2nd Screencheck Draft EIR\Chapter 4\Figure 4.3-18 Existing + Project (Casino Phase) Intersection Traffic Volumes North.ai



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

N

SOURCE: Darnell & Associates, Inc., 2008

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Existing + Project (Casino Phase) Intersection Traffic Volumes - South

FIGURE 4.3-19

F:\projects\634 Calexico\2nd Screencheck Draft EIR\Chapter 4\Figure 4.3-19 Existing + Project (Casino Phase) Intersection Traffic Volumes South.ai

TABLE 4.3-8
Existing + Project (Casino Phase Only) Roadway Segment LOS

Roadway Segment	Maximum Capacity	Existing			Existing + Project (Casino)					
		ADT	V/C	LOS	Project Traffic	ADT	V/C	Increase in V/C	LOS	Impact
Dogwood Road:										
North of I-8	16,200	14,648	0.904	E	220	14,868	0.918	0.014	E	Cuml.
I-8 to McCabe	16,200	10,864	0.671	B	1,319	12,183	0.752	0.081	C	None
McCabe to SR-86	16,200	10,126	0.625	B	1,868	11,994	0.740	0.115	C	None
SR-86 to Jasper	16,200	7,600	0.469	A	2,417	10,017	0.618	0.149	B	None
Jasper to Cole	16,200	6,820	0.421	A	0	6,820	0.421	0.000	A	None
Cole to SR-98	16,200	5,320	0.328	A	659	5,979	0.369	0.041	A	None
SR-111:										
North of I-8	56,300	16,800	0.298	A	1,099	17,899	0.318	0.020	A	None
I-8 to McCabe	56,300	38,000	0.675	B	1,978	39,978	0.710	0.035	C	None
McCabe to Heber	56,300	34,400	0.611	B	1,978	36,378	0.646	0.035	B	None
Heber to Jasper	56,300	36,500	0.648	B	1,978	38,478	0.683	0.035	B	None
Jasper to Cole	56,300	36,500	0.648	B	1,648	38,148	0.678	0.029	B	None
Cole to SR-98	56,300	34,400	0.611	B	1,648	36,048	0.640	0.029	B	None
South of SR-98	60,000	51,400	0.857	D	1,648	53,048	0.884	0.027	D	Cuml.
Bowker Road:										
I-8 to McCabe	16,200	1,007	0.062	A	549	1,556	0.096	0.034	A	None
McCabe to Heber	16,200	937	0.058	A	549	1,486	0.092	0.034	A	None
Heber to Jasper	16,200	906	0.056	A	549	1,455	0.090	0.034	A	None
Jasper to Cole	16,200	962	0.059	A	0	962	0.059	0.000	A	None
Cole to SR-98	17,500	515	0.029	A	0	515	0.029	0.000	A	None
South of SR-98	17,500	103	0.006	A	0	103	0.006	0.000	A	None
Meadows Road:										
Cole to SR-98	17,500	10,094	0.577	A	879	10,973	0.627	0.050	B	None
South of SR-98	17,500	6,283	0.359	A	879	7,162	0.409	0.050	A	None
Jasper Road:										
Scaroni to SR-111	17,500	1,134	0.065	A	4,835	5,969	0.341	0.276	A	None
SR-111 to Yourman	17,500	4,128	0.236	A	1,209	5,337	0.305	0.069	A	None
Yourman to Meadows	17,500	412	0.024	A	1,209	1,621	0.093	0.069	A	None
Meadows to Bowker	17,500	375	0.021	A	1,209	1,584	0.091	0.069	A	None
Cole Road:										
Enterprise to SR-111	17,500	15,965	0.912	E	659	16,624	0.950	0.038	E	Cuml.
SR-111 to Yourman	37,500	21,224	0.566	A	1,758	22,982	0.613	0.047	B	None
Yourman to Meadows	37,500	10,197	0.272	A	1,758	11,955	0.319	0.047	A	None
Meadows to Bowker	37,500	7,509	0.200	A	879	8,388	0.224	0.023	A	None

Notes: ADT = average daily traffic; V/C = volume to capacity ratio; LOS = Level of Service; Cuml. = Cumulative

Source: Darnell & Associates, Inc., 2008

TABLE 4.3-9
Existing + Project (Casino Phase Only) Intersection Operation

Intersection	Crit.	Existing Conditions				Existing + Project (Casino Only)						Impact
		AM PEAK		PM PEAK		AM PEAK			PM PEAK			
		Delay	LOS	Delay	LOS	Delay	LOS	Incr.	Delay	LOS	Incr.	
I-8 Westbound/ Dogwood (TWSC)	WB	19.5	C	130.3	F	19.8	C	0.3	189.6	F	59.3	Cuml.
I-8 Eastbound/ Dogwood (TWSC)	EB	20.7	C	43.6	E	20.7	C	0.0	49.8	E	6.2	Cuml.
I-8 Westbound/ Bowker (TWSC)	WB	9.5	A	9.7	A	9.7	A	0.2	9.9	A	0.2	None
I-8 Eastbound/Bowker (TWSC)	EB	9.1	A	9.1	A	9.2	A	0.1	9.3	A	0.2	None
Dgwood/Chick (Signal)	Int.	3.5	A	6.9	A	3.5	A	0.0	7.0	A	0.1	None
Dogwood/McCabe North (TWSC)	WB	10.7	B	13.7	B	10.8	B	0.1	14.9	B	1.2	None
Dogwood/McCabe South (TWSC)	EB	8.2	A	9.5	A	8.3	A	0.1	10.4	B	0.9	None
	NB	11.0	B	12.1	B	11.3	B	0.3	14.8	B	2.7	
	SB	8.7	A	13.5	B	8.9	A	0.2	16.9	C	3.4	
McCabe/Bowker (TWSC)	NB	9.4	A	9.2	A	9.4	A	0.0	9.3	A	0.1	None
	SB	9.3	A	9.4	A	9.4	A	0.1	9.6	A	0.2	
Dogwood/~~Abatti~~ Corell (TWSC)	EB	14.5	B	12.7	B	15.0	B	0.5	13.9	B	1.2	None
	WB	11.6	B	11.0	B	11.7	B	0.1	11.8	B	0.8	
Dogwood/Heber (AWSC)	EB	33.4	D	18.1	C	42.2	E	8.8	29.1	D	11.0	Cuml.
	WB	25.3	D	13.3	B	29.5	D	4.2	17.0	C	3.7	
	NB	34.8	D	14.2	B	44.4	E	9.6	22.6	C	8.4	
	SB	22.8	C	19.6	C	28.5	D	5.7	40.9	E	21.3	
SR-111/Heber (Signal)	Int.	12.9	B	26.9	C	12.9	B	0.0	29.5	C	2.6	None
Heber/Yourman (TWSC)	NB	9.9	A	10.3	B	9.9	A	0.0	10.3	B	0.0	None
	SB	9.3	A	10.1	B	9.3	A	0.0	10.1	B	0.0	
Heber/Bowker (TWSC)	NB	9.8	A	10.1	B	9.9	A	0.1	10.3	B	0.2	None
	SB	9.6	A	10.1	B	9.7	A	0.1	10.4	B	0.3	
Dogwood/Willoughby (TWSC)	EB	18.0	C	15.4	C	19.9	C	1.9	18.6	C	3.2	None
	WB	16.8	C	12.0	B	18.2	C	1.4	12.0	B	0.0	
Jasper/Pitzer (TWSC)	SB	9.0	A	8.8	A	9.2	A	0.2	9.6	A	0.8	None
Jasper/Scaroni (AWSC)	EB	7.3	A	7.2	A	7.5	A	0.2	8.7	A	1.5	None
	WB	7.4	A	7.6	A	8.0	A	0.6	10.2	B	2.6	
	NB	7.4	A	7.3	A	7.7	A	0.3	8.9	A	1.6	
	SB	7.3	A	7.4	A	7.5	A	0.2	8.5	A	1.1	
Jasper/SR-111 (Signal)	Int.	14.0	B	20.1	C	15.9	B	1.9	38.8	D	18.7	Direct
Jasper/Yourman (TWSC)	NB	10.3	B	11.0	B	10.5	B	0.2	12.1	B	1.1	None
	SB	9.5	A	10.4	B	9.7	A	0.2	11.2	B	0.8	
Jasper/Meadows (TWSC)	NB	8.8	A	8.8	A	8.8	A	0.1	9.1	A	0.4	None
	SB	8.9	A	8.9	A	8.9	A	0.1	9.2	A	0.4	
Jasper/Bowker TWSC)	EB	9.9	A	9.8	A	10.1	B	0.2	10.9	B	1.1	None
	WB	10.1	B	10.3	B	10.3	B	0.2	10.9	B	0.6	
Dogwood/Cole (TWSC)	EB	12.1	B	13.2	B	12.3	B	0.2	16.2	C	3.0	None
	WB	9.8	A	10.7	B	10.0	B	0.2	14.9	B	4.2	
Cole/Scaroni (TWSC)	NB	22.5	C	121.1	F	23.6	C	1.1	237.2	F	116.1	Cuml.
	SB	114.1	F	343.8	F	169.1	F	55.5	*	F	*	
SR-111/Cole (Signal)	Int.	38.2	D	42.9	D	39.1	D	0.9	42.5	D	-0.4	Cuml.
Cole/Yourman (Signal)	Int.	33.2	C	32.5	C	33.4	C	0.2	32.8	C	0.3	None
Cole/Meadows (Signal)	Int.	24.4	C	14.7	B	24.6	C	0.2	15.2	B	0.5	None
Cole/Bowker (AWSC)	EB	7.7	A	8.1	A	7.8	A	0.1	8.5	A	0.4	None
	WB	9.2	A	9.1	A	9.4	A	0.2	9.6	A	0.5	
	NB	8.3	A	8.1	A	8.3	A	0.0	8.3	A	0.2	
	SB	8.1	A	8.2	A	8.2	A	0.1	8.3	A	0.1	
SR-98/Cole (TWSC)	SB	6.3	B	7.3	A	6.3	A	0.0	7.5	A	10.2	None
SR-98/Dogwood (Signal)	Int.	6.7	A	9.7	A	6.8	A	0.1	11.5	B	1.8	None
SR-98/SR-111 (Signal)	Int.	32.0	C	38.6	D	32.3	C	0.3	39.9	D	1.3	Cuml.
SR-98/Rockwood (Signal	Int.	11.5	B	17.6	B	11.5	B	0.0	17.6	B	0.0	None
SR-98/Meadows (Signal)	Int.	26.7	C	17.2	B	26.7	C	0.0	17.4	B	0.2	None
SR-98/Bowker (TWSC)	NB	11.6	B	12.2	B	11.6	B	0.0	12.2	B	0.0	None
	SB	10.6	B	11.5	B	10.6	B	0.0	11.5	B	0.0	

Notes: Delay is measured in seconds per vehicle; LOS = level of service; AWSC = all way stop; TWSC = two way stop; Int = intersection; NB = northbound; SB = southbound; EB = eastbound; WB = westbound; Cuml = cumulative impact; Direct = direct impact; Incr = Increase; Crit = critical movement; * = Error-traffic too high to detect; Delay and LOS calculated using SYNCHRO (with HCS value)

Source: Darnell & Associates, Inc., 2008

- I-8 Westbound/Dogwood Road;
- I-8 Eastbound/Dogwood Road;
- Dogwood Road/Heber Road;
- Cole Road/Scaroni Road;
- SR-111/Cole Road; and,
- SR-98/SR-111.

All other intersections will operate at a LOS C or better.

Caltrans Intersection Lane Vehicle Analysis

Caltrans ILV for the existing conditions plus the Casino phase traffic is summarized in Table 4.3-10. As shown in Table 4.3-10, with the addition of the Casino Phase project traffic all interchanges will operate at 1,500 ILV, which is considered acceptable based on Caltrans thresholds. Therefore, no impact is identified with the implementation of the Casino Phase of the proposed project.

TABLE 4.3-10
Summary of Existing Plus Casino Phase Intersection Operation
Caltrans Intersecting Lane Volumes (ILV)

Intersection	Existing Condition		Existing + Casino Phase			
	AM Peak ILV	PM Peak ILV	AM Peak ILV	AM Incr. ILV	PM Peak ILV	PM Incr. ILV
SR-111/Heber	870	1305	874	4	1342	37
SR-111/Jasper	748	1092	768	20	1242	150
SR-111/Cole	1078	1363	1109	31	1455	92
SR-111/SR-98	1105	1221	1115	10	1246	25
SR-98/Cole	330	451	344	14	478	27
SR-98/Dogwood	480	840	490	10	885	45
SR-98/Rockwood	628	743	628	0	743	0
SR-98/Meadows/Andrade	936	550	936	0	550	0

Notes: ILV= Intersecting Lane Volumes (Caltrans Methodology); ILV Value = less than 1200 (Free Flow); ILV Value = 1200 – 1500 (Acceptable Flow); ILV Value = exceeds 1500 (Deficient Flow); AM Incr ILV = AM peak hour increase in ILV value due to project
PM Incr ILV = PM Peak Hour increase in ILV value due to project

Source: Darnell & Associates, 2008.

B. Existing Plus Casino Phase and Phase 1

The Casino and Phase 1 project traffic (49,468ADT) was added to the existing traffic volumes. The daily traffic volumes for the existing conditions plus the Casino Phase and Phase 1 condition is depicted in Figure 4.3-20. The intersection peak hour volumes for this condition are depicted in Figure 4.3-21 for the northerly study area and Figure 4.3-22 for the southerly study area.

Roadway Segments

As identified in Table 4.3-11, with the addition of the Casino Phase plus Phase 1 project traffic, the proposed project would have a direct impact to the following roadway segments:

- Dogwood Road: I-8 to McCabe;
- Dogwood Road: McCabe to SR-86 (Heber);
- Dogwood Road: SR-86 (Heber) to Jasper; and,
- Jasper Road: Scaroni to SR-111.

The project impact to these roadway segments is considered a significant impact. Implementation of Mitigation Measures T2 through T5 will reduce the impact to these roadway segments to a level less than significant.

In addition, the addition of the Casino Phase and Phase1 project traffic will result in significant cumulative impacts to the following roadway segments that are discussed in detail in Section 5.0 Cumulative Impacts of this EIR:

- Dogwood Road: north of I-8;
- SR-111: South of SR-98; and,
- Cole Road: Enterprise to SR-111.

All other roadway segments will operate at a LOS C or better.

Intersections

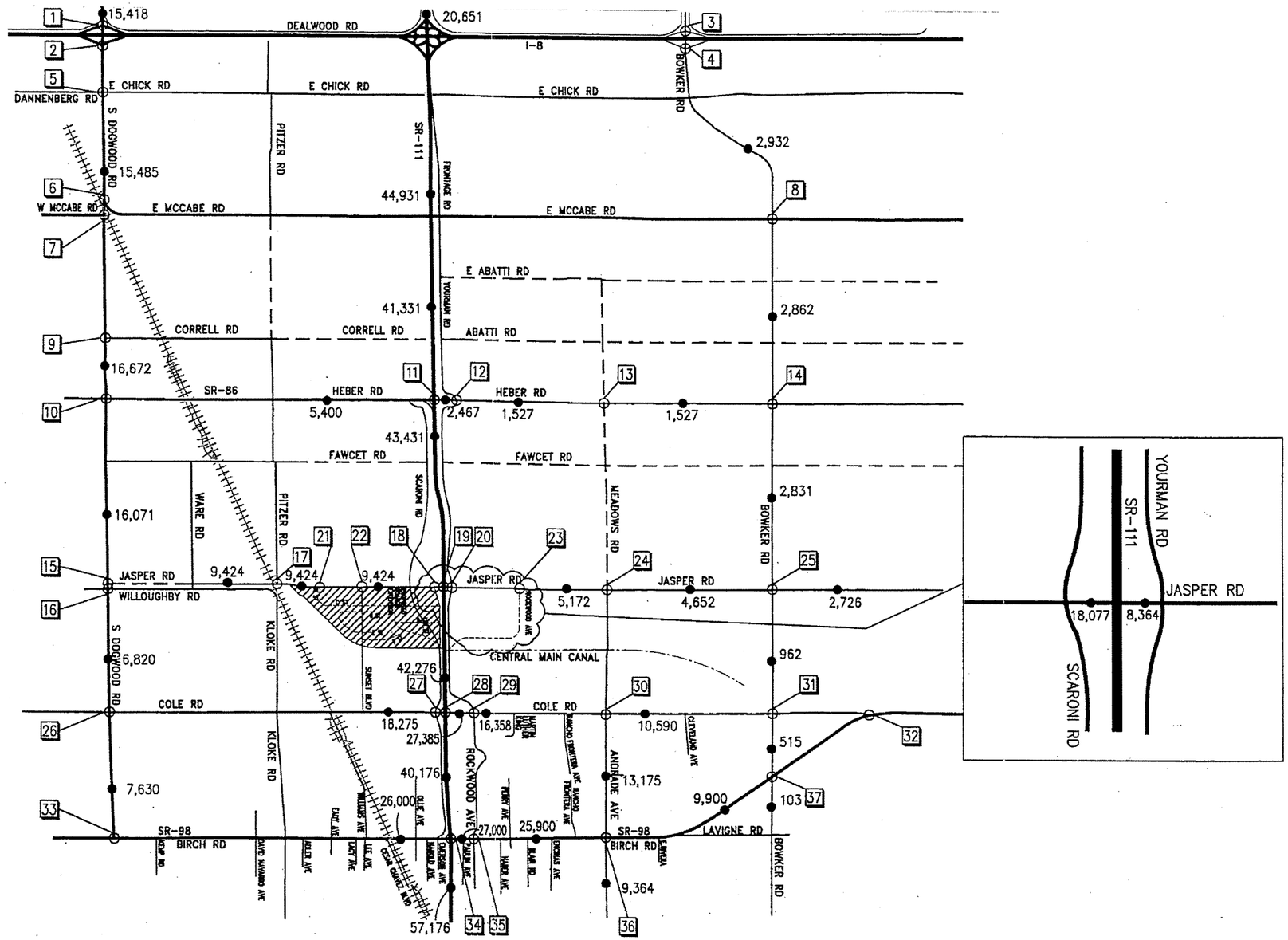
Intersection operation for the existing conditions plus the Casino Phase and Phase 1 project traffic is summarized in Table 4.3-12. With the addition of the Casino Phase and Phase 1 project traffic, the proposed project would have a direct impact on the following intersection during the AM Peak Hour:

- Dogwood Road and Willoughby (eastbound and westbound).

With the addition of the Casino Phase and Phase 1 project traffic, the proposed project would have a direct impact on the following intersections during the PM Peak Hour:

- Dogwood Road and McCabe South (northbound and southbound);
- Dogwood Road and Willoughby (eastbound and westbound);
- Jasper Road and Scaroni Road (eastbound, westbound, and northbound);
- Jasper Road and SR-111; and,
- Dogwood Road and Cole Road (eastbound and westbound).

The project impact to these intersections is considered a significant impact. Implementation of Mitigation Measures T6 through T10 will reduce the impact to these intersections to a level less than significant.



SOURCE: Darnell & Associates, Inc., 2008

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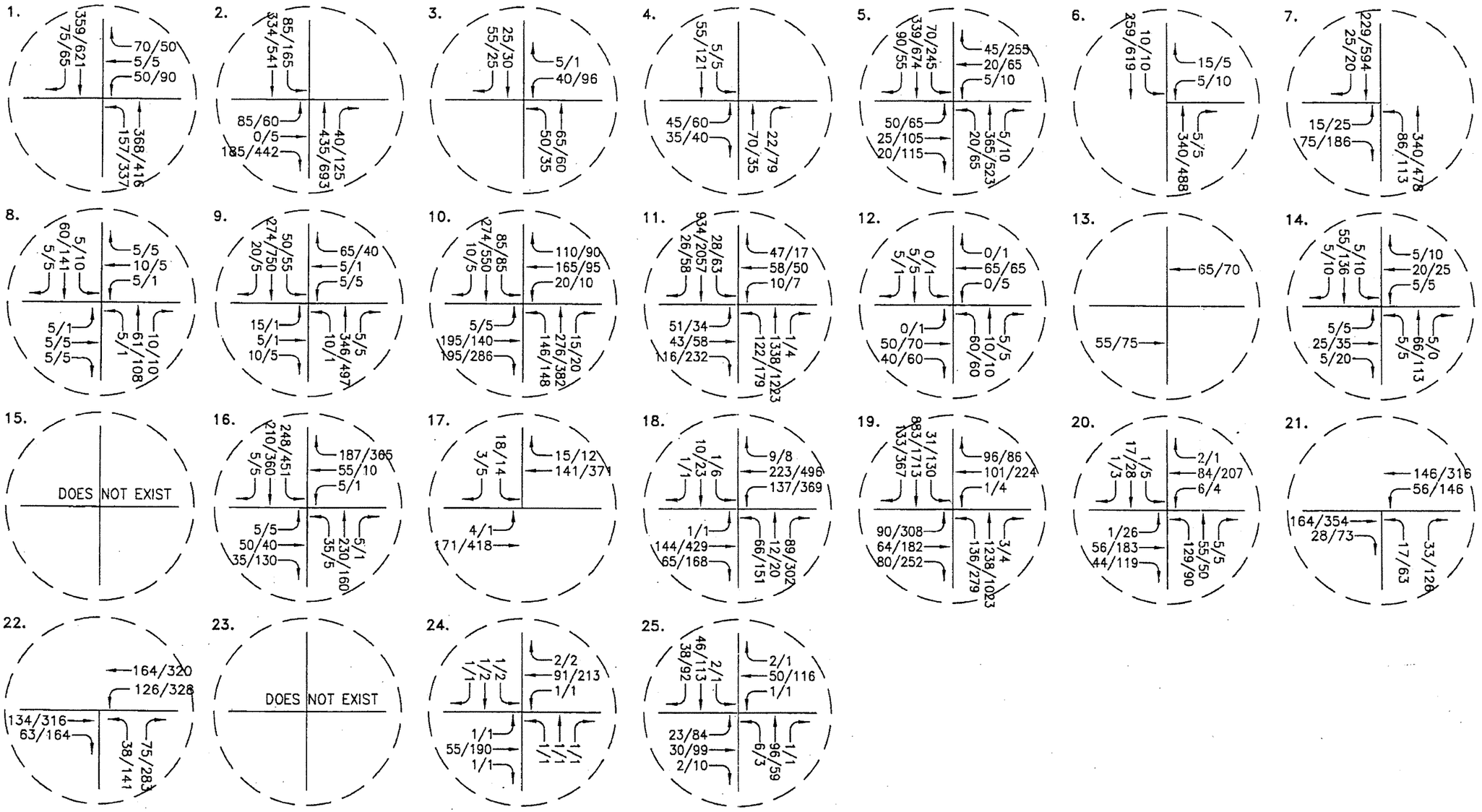
Existing + Project (Casino Phase + Phase 1) Daily Traffic Volumes

FIGURE 4.3-20

F:\projects\634 Calexico\2nd Screencheck Draft EIR\Chapter 4\Figure 4.3-20 Existing + Project (Casino Phase + Phase 1) Daily Traffic Volumes.ai



SOURCE: Darnell & Associates, Inc., 2008

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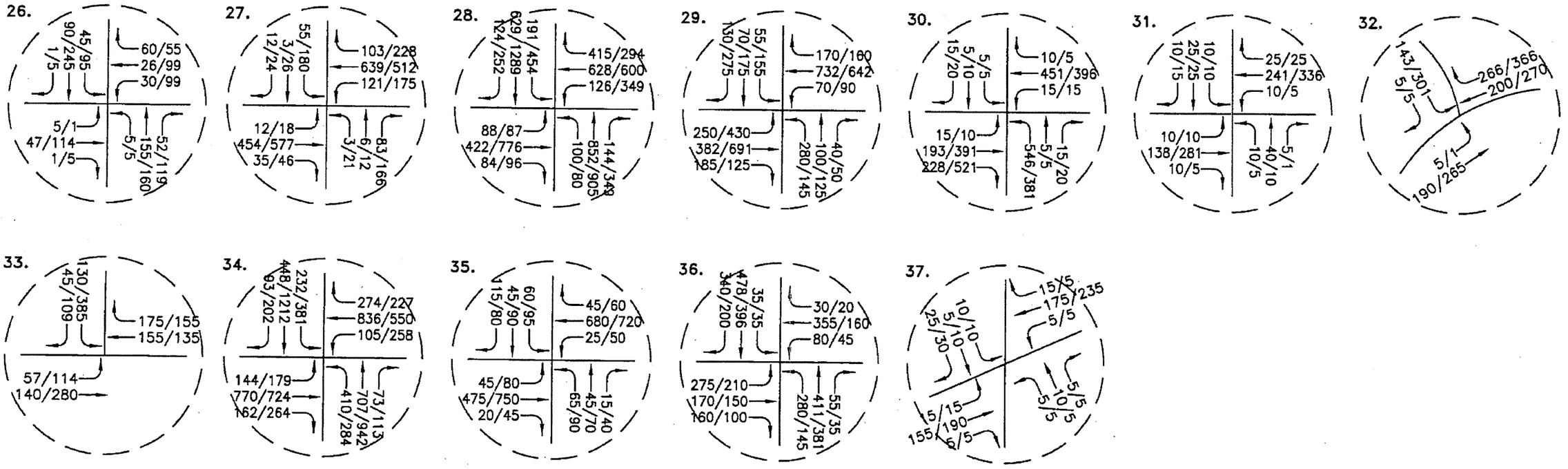
Existing + Project (Casino Phase + Phase 1) Intersection Traffic Volumes - North

FIGURE 4.3-21

F:\projects\634 Calexico\2nd Screencheck Draft EIR\Chapter 4\Figure 4.3-21 Existing + Project (Casino Phase + Phase 1) Intersection Traffic Volumes North.ai



LEGEND

XX/YY – AM/PM PEAK HOUR TURN VOLUMES

⟶ – DIRECTION OF TRAVEL

N

SOURCE: Darnell & Associates, Inc., 2008

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Existing + Project (Casino Phase + Phase 1) Intersection Traffic Volumes - South

FIGURE 4.3-22

F:\projects\634 Calexico\2nd Screencheck Draft EIR\Chapter 4\Figure 4.3-22 Existing + Project (Casino Phase + Phase 1) Intersection Traffic Volumes South.ai

TABLE 4.3-11
Existing + Project (Casino Phase + Phase 1) Roadway Segment LOS

Roadway Segment	Maximum Capacity	Existing			Existing + Project (Casino + Phase 1)					
		ADT	V/C	LOS	Project Traffic	ADT	V/C	Increase in V/C	LOS	Impact
Dogwood Road:										
North of I-8	16,200	14,648	0.904	E	770	15,418	0.952	0.048	E	Cuml.
I-8 to McCabe	16,200	10,864	0.671	B	4,621	15,485	0.956	0.285	E	Direct
McCabe to SR-86	16,200	10,126	0.625	B	6,546	16,672	1.029	0.404	F	Direct
SR-86 to Jasper	16,200	7,600	0.469	A	8,471	16,071	0.992	0.523	E	Direct
Jasper to Cole	16,200	6,820	0.421	A	0	6,820	0.421	0.000	A	None
Cole to SR-98	16,200	5,320	0.328	A	2,310	7,630	0.471	0.143	A	None
SR-111:										
North of I-8	56,300	16,800	0.298	A	3,851	20,651	0.367	0.068	A	None
I-8 to McCabe	56,300	38,000	0.675	B	6,931	44,931	0.798	0.123	C	None
McCabe to Heber	56,300	34,400	0.611	B	6,931	41,331	0.734	0.123	C	None
Heber to Jasper	56,300	36,500	0.648	B	6,931	43,431	0.771	0.123	C	None
Jasper to Cole	56,300	36,500	0.648	B	5,776	42,276	0.751	0.103	C	None
Cole to SR-98	56,300	34,400	0.611	B	5,7765,7	40,176	0.714	0.103	C	None
South of SR-98	60,000	51,400	0.857	D	76 5,776	57,176	0.953	0.096	E	Cuml.
Bowker Road:										
I-8 to McCabe	16,200	1,007	0.062	A	1,925	2,932	0.181	0.119	A	None
McCabe to Heber	16,200	937	0.058	A	1,925	2,862	0.177	0.119	A	None
Heber to Jasper	16,200	906	0.056	A	1,925	2,831	0.175	0.119	A	None
Jasper to Cole	16,200	962	0.059	A	0	962	0.059	0.000	A	None
Cole to SR-98	17,500	515	0.029	A	0	515	0.029	0.000	A	None
South of SR-98	17,500	103	0.006	A	0	103	0.006	0.000	A	None
Meadows Road:										
Cole to SR-98	17,500	10,094	0.577	A	3,080	13,174	0.753	0.176	C	None
South of SR-98	17,500	6,283	0.359	A	3,080	9,363	0.535	0.176	A	None
Jasper Road:										
Scaroni to SR-111	17,500	936	0.053	A	16,943	17,879	1.022	0.968	F	Direct
SR-111 to Yourman	17,500	412	0.024	A	4,236	4,648	0.266	0.242	A	None
Yourman to Meadows	17,500	412	0.024	A	4,236	4,648	0.266	0.242	A	None
Meadows to Bowker	17,500	375	0.021	A	4,236	4,611	0.263	0.242	A	None
Cole Road:										
Enterprise to SR-111	17,500	15,965	0.912	E	2,310	18,275	1.044	0.132	F	Cuml.
SR-111 to Yourman	37,500	21,224	0.566	A	6,161	27,385	0.730	0.164	C	None
Yourman to Meadows	37,500	10,197	0.272	A	6,161	16,358	0.436	0.164	A	None
Meadows to Bowker	37,500	7,509	0.200	A	3,080	10,589	0.282	0.082	A	None

Notes: ADT = average daily traffic; V/C = volume to capacity ratio; LOS = Level of Service; Cuml. = Cumulative

Source: Darnell & Associates, Inc., 2008

TABLE 4.3-12
Existing + Project (Casino Phase + Phase 1) Intersection Operation

Intersection	Crit.	Existing Conditions				Existing + Project (Casino + Phase 1)						Impact
		AM PEAK		PM PEAK		AM PEAK			PM PEAK			
		Delay	LOS	Delay	LOS	Delay	LOS	Incr.	Delay	LOS	Incr.	
I-8 Westbound/ Dogwood (TWSC)	WB	19.5	C	130.3	F	23.4	C	3.9	602.9	F	472.6	Cuml.
I-8 Eastbound/ Dogwood (TWSC)	EB	20.7	C	43.6	E	21.0	C	0.3	110.2	F	66.6	Cuml.
I-8 Westbound/ Bowker (TWSC)	WB	9.5	A	9.7	A	10.2	B	0.7	10.5	B	0.8	None
I-8 Eastbound/Bowker (TWSC)	EB	9.1	A	9.1	A	9.4	A	0.3	9.8	A	0.7	None
Dgwood/Chick (Signal)	Int.	3.5	A	6.9	A	3.5	A	0.0	8.6	A	1.7	None
Dogwood/McCabe North (TWSC)	WB	10.7	B	13.7	B	11.4	B	0.7	19.6	C	5.9	None
Dogwood/McCabe South (TWSC)	EB	8.2	A	9.5	A	9.0	A	0.8	14.1	B	4.9	Direct
	NB	11.0	B	12.1	B	13.8	B	2.8	65.0	F	52.9	
	SB	8.7	A	13.5	B	10.2	B	1.5	73.0	F	59.5	
McCabe/Bowker (TWSC)	NB	9.4	A	9.2	A	9.6	A	0.2	9.8	A	0.6	None
	SB	9.3	A	9.4	A	9.6	A	0.3	10.2	B	0.8	
Dogwood/Abatti (TWSC)	EB	14.5	B	12.7	B	18.4	C	3.9	21.4	C	8.7	None
	WB	11.6	B	11.0	B	12.8	B	1.2	16.0	C	5.0	
Dogwood/Heber (AWSC)	EB	33.4	D	18.1	C	91.7	F	58.3	84.0	F	65.9	Cuml.
	WB	25.3	D	13.3	B	45.5	E	20.2	23.1	C	9.8	
	NB	34.8	D	14.2	B	147.2	F	112.4	220.1	F	205.9	
	SB	22.8	C	19.6	C	83.4	F	60.6	317.4	F	297.8	
SR-111/Heber (Signal)	Int.	12.9	B	26.9	C	13.4	B	0.5	29.8	C	2.9	None
Heber/Yourman (TWSC)	NB	9.9	A	10.3	B	9.9	A	0.0	10.3	B	0.0	None
	SB	9.3	A	10.1	B	9.3	A	0.0	10.1	B	0.0	
Heber/Bowker (TWSC)	NB	9.8	A	10.1	B	10.1	B	0.3	11.0	B	0.9	None
	SB	9.6	A	10.1	B	10.0	A	0.4	11.4	B	1.3	
Dogwood/Willoughby (TWSC)	EB	18.0	C	15.4	C	37.1	E	19.1	168.0	F	152.6	Direct
	WB	16.8	C	12.0	B	31.3	D	14.5	21.2	C	9.2	
Jasper/Pitzer (TWSC)	SB	9.0	A	8.8	A	10.6	B	1.6	15.3	C	6.5	None
Jasper/Scaroni (AWSC)	EB	7.3	A	7.2	A	9.9	A	2.6	160.9	F	153.7	Direct
	WB	7.4	A	7.6	A	13.3	B	5.9	442.3	F	434.7	
	NB	7.4	A	7.3	A	10.1	B	2.7	63.0	F	55.7	
	SB	7.3	A	7.4	A	8.9	A	1.6	13.5	B	6.1	
Jasper/SR-111 (Signal)	Int.	14.0	B	20.1	C	34.9	C	20.9	300.4	F	280.3	Direct
Jasper/Yourman (TWSC)	NB	10.3	B	11.0	B	11.8	B	1.5	18.9	C	7.9	None
	SB	9.5	A	10.4	B	10.4	B	0.9	14.7	B	4.3	
Jasper/Meadows (TWSC)	NB	8.8	A	8.8	A	9.4	A	0.6	11.2	B	2.4	None
	SB	8.8	A	8.9	A	9.4	A	0.6	11.6	B	2.7	
Jasper/Bowker (TWSC)	EB	9.9	A	9.8	A	11.1	B	1.2	16.5	C	6.7	None
	WB	10.1	B	10.3	B	11.1	B	1.0	13.4	B	3.1	
Dogwood/Cole (TWSC)	EB	12.1	B	13.2	B	13.3	B	1.2	25.8	D	12.6	Direct
	WB	9.8	A	10.7	B	12.2	B	2.4	85.9	F	75.2	
Cole/Scaroni (TWSC)	NB	22.5	C	121.1	F	34.3	D	11.8	*	F	*	Cuml.
	SB	114.1	F	343.8	F	*	F	*	*	F	*	
SR-111/Cole (Signal)	Int.	38.2	D	42.9	D	41.5	D	3.3	80.3	F	37.4	Cuml.
Cole/Yourman (Signal)	Int.	33.2	C	32.5	C	34.7	C	1.5	34.2	C	1.7	None
Cole/Meadows (Signal)	Int.	24.4	C	14.7	B	24.6	C	0.2	16.7	B	2.0	None
Cole/Bowker (AWSC)	EB	7.7	A	8.1	A	8.2	A	0.5	10.6	B	2.5	None
	WB	9.2	A	9.1	A	10.1	B	0.9	12.2	B	3.1	
	NB	8.3	A	8.1	A	8.6	A	0.3	8.9	A	0.8	
	SB	8.1	A	8.2	A	8.4	A	0.3	9.0	A	0.8	
SR-98/Cole (TWSC)	SB	6.3	B	7.3	A	6.4	A	0.1	8.2	A	0.9	None
SR-98/Dogwood (Signal)	Int.	6.7	A	9.7	A	8.5	A	1.8	16.1	B	6.4	None
SR-98/SR-111 (Signal)	Int.	32.0	C	38.6	D	33.8	C	1.8	44.0	D	5.4	Cuml.
SR-98/Rockwood (Signal)	Int.	11.5	B	17.6	B	11.5	B	0.0	17.6	B	0.0	None
SR-98/Meadows (Signal)	Int.	26.7	C	17.2	B	27.0	C	0.3	18.3	B	1.1	None
SR-98/Bowker (TWSC)	NB	11.6	B	12.2	B	11.6	B	0.0	12.2	B	0.0	None
	SB	10.6	B	11.5	B	10.6	B	0.0	11.5	B	0.0	

Notes: Delay is measured in seconds per vehicle; LOS = level of service; AWSC = all way stop; TWSC = two way stop; Int = intersection; NB = northbound; SB = southbound; EB = eastbound; WB = westbound; Cuml = cumulative impact; Direct = direct impact; Incr = Increase; Crit = critical movement; * = Error-traffic too high to detect; Delay and LOS calculated using SYNCHRO (with HCS value)

Source: Darnell & Associates, Inc., 2008

In addition, the addition of the Casino Phase and Phase 1 project traffic will result in significant cumulative impacts to the following intersections that are discussed in detail in Section 5.0 Cumulative Impacts of this EIR:

- I-8 Westbound/Dogwood Road;
- I-8 Eastbound/Dogwood Road;
- Dogwood Road/Heber Road;
- Cole Road/Scaroni Road;
- SR-111/Cole Road; and,
- SR-98/SR-111.

All of the other intersections will operate at LOS C or better.

Caltrans Intersection Lane Vehicle Analysis

Caltrans ILV for the existing conditions plus the Casino Phase and Phase 1 project traffic is summarized in Table 4.3-13. As shown in Table 4.3-13, with the addition of the Casino Phase project traffic the following intersections will demonstrate deficiencies based on Caltrans criteria:

- SR-111 and Jasper Road.

The project impact to these intersections is considered a significant impact. Implementation of Mitigation Measure ~~T8~~ T9 will reduce the impact to this intersection to a level less than significant.

In addition, the addition of the Casino Phase and Phase 1 will result in a significant cumulative impact to the following intersection, which is discussed in detail in Section 5.0 Cumulative Impacts of the EIR:

- SR-111 and Cole Road.

C. Total Project (All Phases)

The total project (all phases) will not result in a direct impact to the existing traffic conditions because buildout of the project numbers are added to the Year 2015 near-term cumulative condition. Therefore, only cumulative impacts will occur with complete buildout of the project. The total project is not added to the existing near-term conditions because Phases 2 though 4 will not be developed in the near-term conditions (Year 2008) and therefore these phases were analyzed during the Year 2015, which is identified in Section 5.0 Cumulative Impacts of this EIR.

The future Year 2035 cumulative conditions are also provided in Section 5.0 Cumulative Impacts of this EIR.

4.3.3.4 Proposed Circulation Network and Roadway Improvements

The planned circulation system would provide roadway segments that would connect with the existing offsite community-wide roadway network. Two major north-south links are being planned, including the Future Sunset Boulevard and the Future Scaroni Boulevard Extension. In addition, an internal circulation system comprised of public and private streets is also planned which will provide vehicular and pedestrian movements through the overall project area in both the north-south and east-west directions.

TABLE 4.3-13
Summary of Existing + Casino Phase and Phase 1 Intersection Operation
Caltrans Intersecting Lane Volumes (ILV)

Intersection	Existing Condition		Existing + Casino Phase + Phase 1			
	AM Peak ILV	PM Peak ILV	AM Peak ILV	AM Incr. ILV	PM Peak ILV	PM Incr. ILV
SR-111/Heber	870	1305	908	38	1469	164
SR-111/Jasper	748	1092	991	243	2061	969
SR-111/Cole	1078	1363	1242	164	1773	410
SR-111/SR-98	1105	1221	1157	52	1338	117
SR-98/Cole	330	451	419	89	673	222
SR-98/Dogwood	480	840	547	67	1043	203
SR-98/Rockwood	628	743	628	0	743	0
SR-98/Meadows/Andrade	936	550	936	0	558	0

Notes: ILV= Intersecting Lane Volumes (Caltrans Methodology); ILV Value = less than 1200 (Free Flow); ILV Value = 1200 – 1500 (Acceptable Flow); ILV Value = exceeds 1500 (Deficient Flow); AM Incr ILV = AM peak hour increase in ILV value due to project; PM Incr ILV = PM Peak Hour increase in ILV value due to project

Source: Darnell & Associates, 2008.

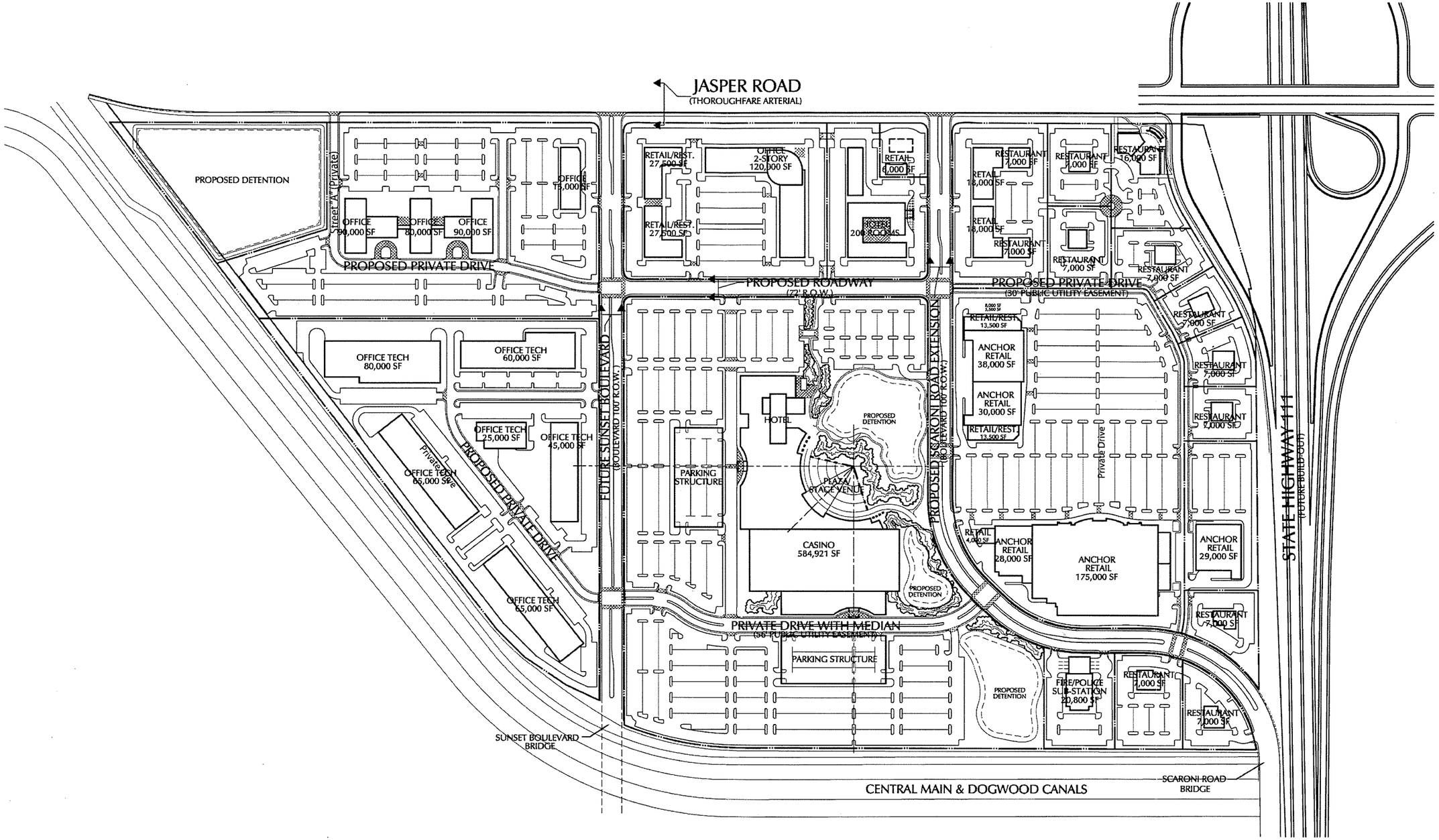
As depicted in Figure 4.3-23 The proposed roadway circulation and improvements are comprised of the following roadways:

Jasper Road – Thoroughfare Arterial

Per the requirements of the City of Calexico, the project will provide half-width improvements along Jasper Road. These improvements include a half-width right-of-way of 105 feet, consisting of a 30-foot drainage ditch with detention and landscaping, 15-foot sidewalk area and parkway, four 12-foot travel lanes, and a 12-foot median/left turn lane. For the proposed project, these improvements will be required to be constructed from SR-111 to the railroad tracks at the property line on the west side of the project site. For the Year 2015 with the total project, Jasper Road requires a minimum of four-lane divided highway. The six-lane highway standards will ultimately be required with buildout of the entire Jasper Road corridor project from SR-111 to Meadows Road. This projected need depends on the timing of buildout of all projects in the corridor, which is estimated by Year 2035. As discussed in Section 5.0 Cumulative Impacts of this EIR, the applicant is required to contribute a fair share contribution into the Jasper Corridor Benefit Assessment District, which was created by the City to pay for these improvements to the Jasper Road.

Future Sunset Boulevard/Proposed Scaroni Road Extension

The project will provide future alignments in the north/south direction for a Future Sunset Boulevard and Proposed Scaroni Road Extension. The Future Sunset Boulevard will be located within the western half of the project site and will connect Jasper Road to the north to proposed onsite roadways to the south. The Proposed Scaroni Road Extension will be located within the eastern half of the project site and will connect Jasper Road to the north to the existing Scaroni Road alignment to the south. To do this, the Proposed



SOURCE: Darnell & Associates, Inc., 2008

8/29/08

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111 Calexico Place Specific Plan EIR

Proposed Circulation System

FIGURE 4.3-23

F:\projects\634 Calexico\1st Screencheck Draft EIR\Traffic Study Figures\Chapter 4\Figure 4.3-23 Proposed Circulation System.ai

Scaroni Road Extension alignment will curve slightly to the east/west direction through the project site to connect to the existing Scaroni Road.

Proposed Scaroni Road Extension and Future Sunset Boulevard would each include a right-of-way of 100 feet, consisting of two-feet of parkway on both sides, five-foot sidewalks on both sides, five-foot parkside along the curb on both sides, four-foot bike lane on both sides, two 14-foot travel lanes (one in each direction), two 12-foot travel lanes (one in each direction), and a 16-foot median with turn lane. The Scaroni Road Extension would require the existing Scaroni Road bridge over the Dogwood and Central Main canals to be extended to align with the extended road. In addition, the extension of Sunset Boulevard would require the construction of a bridge over the Dogwood and Central Main canals in order to connect the road to Cole Road. The bridge extension on Scaroni Road and new bridge on Sunset Boulevard would be designed to span over the canals, in order to avoid impacts to the canals. The new Sunset Bridge is not required with the construction of the Casino/Resort Phase only; however, it would be required with the development of the Casino/Resort Phase and Phase 1. The developer will be required to pay a fair share contribution towards the development of these bridges and the City is responsible for the construction of these bridges.

Proposed Public Roadway

One proposed Public Roadway will run in the east/west direction throughout the project site and will provide connection between the various onsite uses and activities. Proposed improvement includes a right-of-way of 72 feet, consisting of five-foot sidewalk on both sides, five-foot parkways on both sides, two 14-foot travel lanes (one in either direction), and two 12-foot travel lanes (one in either direction). The developer will be required to pay for and construct this road. This road will be constructed during the Casino/Resort Phase and/or Phase 1 of the project.

Private Drives

Two proposed Private Drives will run in the east/west direction throughout the project site and will provide connection between the various onsite uses and activities. Proposed improvements include a private right-of-way of 52 feet, consisting of six-foot sidewalks on both sides, five-foot parkways on both sides, and two 15-foot travel lanes (one in either direction). The developer will be required to construct and pay for these roads. These roads will be constructed during the Casino/Resort Phase and/or Phase 1 of the project.

Private Drives with Medians

One proposed Private Drive with a Median will run in the east/west direction throughout the project site and will provide connection between various onsite uses and activities. This proposed improvement includes a private right-of-way of 78 feet, consisting of six-foot sidewalks on both sides, five-foot parkways on both sides, four 12-foot travel lanes (two in either direction), and an eight-foot median with turn lane. The developer will be required to construct and pay for this road. This road will be constructed during the Casino/Resort and/or Phase 1 of the project.

All public roadway improvements will be designed and constructed in compliance with all City of Calexico and Caltrans regulations.

4.3.3.5 Site Access

The project proposes three driveway access points on Jasper Road west of SR-111. The realignment of Scaroni Road to the west will form the most easterly access to the project. A second major access on Jasper Road is proposed west of the Scaroni Road alignment and is currently labeled Future Sunset Boulevard. The third driveway to Jasper Road is located west of the Future Sunset Boulevard and is identified as Street "A".

The project access at the realignment of Scaroni Road at Jasper Road is analyzed above and in Section 5.0 Cumulative Impacts for all phases of the project. The intersection requires a traffic signal, with dual northbound left turn lanes, dual northbound right turn lanes, dual westbound left lanes and an exclusive eastbound right turn lane within Jasper Road (assuming Jasper Road with six through lanes by Year 2035). As discussed above, for the Year 2015 with the total project, Jasper Road requires a minimum of four-lane divided highway. The six-lane highway standards will ultimately be required with buildout of the entire Jasper Road corridor project from SR-111 to Meadows Road.

At Jasper Road and Street "A" a traffic signal, two northbound lanes, dual westbound left lanes, an exclusive eastbound right turn lane within Jasper Road (as a 6-lane roadway) are required.

Additionally, the project is required to construct Sunset Boulevard south to Cole Road, which will create an intersection, which ultimately requires a traffic signal, and an eastbound left turn lane.

A. Access Operation

Existing Plus Casino Phase Access

Project access operation for the existing plus Casino Phase is summarized in Table 4.3-14. For the Casino Phase, the Street "A", Sunset Boulevard, and Cole Road/Sunset Boulevard intersections can operate effectively with stop control on the minor leg (project side) with no additional turn lanes.

TABLE 4.3-14
Existing Plus Casino Phase Access Operation

Intersection	Critical Movement	Existing + Casino Phase			
		AM Peak		PM Peak	
		Delay	LOS	Delay	LOS
Jasper/Street "A" (stop sign)	Northbound	9.0	A	9.3	A
Jasper/Sunset (stop sign)	Northbound	9.1	A	10.3	B
Cole/Sunset (stop sign)	N/A	N/A	N/A	N/A	N/A

Notes: Delay is measured in seconds per vehicle, N/A= Not Applicable and LOS=level of service.
Source: Darnell & Associates, 2008.

Existing Plus Casino Phase and Phase 1 Access

This condition assumes four-lanes on Jasper Road. Project access operation for the existing plus Casino Phase and Phase 1 conditions is summarized in Table 4.3-15. For the Casino Phase plus Phase 1, the Street"A", Sunset Boulevard, and Cole Road/Sunset Boulevard intersections can operate effectively with stop control on the minor leg (project side). Westbound left turn lanes are required on Jasper Road at both driveways. An eastbound left turn lane is required at Cole Road/Sunset Boulevard.

TABLE 4.3-15
Existing Plus Casino Phase and Phase 1 Access Operation

Intersection	Critical Movement	Existing + Casino Phase			
		AM Peak		PM Peak	
		Delay	LOS	Delay	LOS
Jasper/Street "A" (signal)	Intersection	31.8	C	24.8	C
Jasper/Sunset (signal)	Intersection	31.7	C	30.8	C
Cole/Sunset (signal)	Intersection	21.2	C	34.1	C

Notes: Delay is measured in seconds per vehicle and LOS=level of service.
Source: Darnell & Associates, 2008.

Year 2015 Plus Casino Project Access

Project access operation for the Year 2015 conditions with the Casino Phase only traffic is summarized in Table 4.3-16. The Jasper Road driveways operate effectively with stop control on egress with four lanes on Jasper Road. The intersection of Cole Road/Sunset Boulevard will require a traffic signal.

TABLE 4.3-16
Year 2015 Plus Casino Phase Access Operation

Intersection	Critical Movement	Existing + Casino Phase			
		AM Peak		PM Peak	
		Delay	LOS	Delay	LOS
Jasper/Street "A" (stop control)	Northbound	10.6	B	14.0	B
Jasper/Sunset (stop control)	Northbound	11.8	B	22.7	C
Cole/Sunset (signal)	Intersection	15.4	B	8.2	A

Notes: Delay is measured in seconds per vehicle and LOS=level of service.
Source: Darnell & Associates, 2008.

Year 2015 Plus Total Project Access

Project access operation for the Year 2015 condition with the Total Project (All Phases) traffic is summarized in Table 4.3-17. The Jasper Road driveways operate effectively with traffic signal control with four lanes on Jasper Road. The intersection of Cole Road and Sunset Boulevard also requires a traffic signal. Left turn lanes in Jasper Road and Cole Road are required with two egress lanes (project side) at all driveways.

TABLE 4.3-17
Year 2015 Plus Total Project (All Phases) Access Operation

Intersection	Critical Movement	Existing + Casino Phase			
		AM Peak		PM Peak	
		Delay	LOS	Delay	LOS
Jasper/Street "A" (signal)	Intersection	24.9	C	24.8	C
Jasper/Sunset (signal)	Intersection	31.9	C	29.5	C
Cole/Sunset (signal)	Intersection	21.0	C	33.4	C

Notes: Delay is measured in seconds per vehicle and LOS=level of service.
Source: Darnell & Associates, 2008.

With the implementation of the recommended traffic controls and configurations during the design of the final site, all access points will operate at adequate levels of service. In addition, no design features were identified as creating traffic hazards. Therefore, a less than significant impact is identified for this issue area.

4.3.3.6 *Parking*

Per the parking requirements provided in the City of Calexico's Zoning Ordinance Chapter 13, the proposed project is required to provide 5,400 spaces. The commercial highway component of the project will provide approximately 6,600 parking spaces, which is in compliance with the City of Calexico Code for parking. In addition, the casino will provide approximately 6,000 additional parking spaces within a parking structure for use by patrons of the casino and its ancillary uses. Therefore, the proposed project will provide sufficient parking in accordance with the City of Calexico General Plan. Both surface parking and parking structure (for the Casino) will be provided within the project site. Therefore, no impact to parking is identified.

4.3.3.7 *Alternative Transportation*

The proposed project will be required to comply with the City of Calexico Bicycle Master Plan. In addition, as discussed above in section 4.3.3.4, the proposed project will be providing four-foot bike lanes on both sides of Sarconi Road and Sunset Boulevard to encourage cycling as an alternative use to the automobile.

The closest IVT bus stop to the project site is located at the intersection of Cole Road and SR-111 approximately 0.5 miles from the site. Currently, there are no current plans to include any bus turn-out locations on the project site. It is anticipated that a bus service system will be provided by the Casino for Casino patrons. The details of this service have not yet been determined. Therefore, with compliance with the City of Calexico Bicycle Master Plan, the proposed project would not conflict with any adopted policies, plans, or programs supporting alternative transportation. Furthermore, in order to ensure that the project promotes alternative transportation, Mitigation Measure T11 shall be implemented, which requires the project to development Transportation Demand Management plan. Therefore, this issue is considered a less than significant impact.

4.3.4 Significance of Impact

4.3.4.1 Traffic

Existing Plus Casino Phase

With the addition of 10,988 ADT from the Casino Phase to the existing conditions no direct roadway segment impacts will be significant. However, the Jasper Road and SR-111 intersection will be significantly impacted.

Existing Plus Casino Phase and Phase 1

With the addition of 49,468 ADT from the Casino Phase and Phase 1 to the existing conditions direct impacts to four roadway segments and six intersections will be significant. These are:

Roadway Segments:

Dogwood Road: I-8 to McCabe Road
McCabe Road to Heber Road
Heber Road to Jasper Road
Jasper Road: Scaroni Road to SR-11

Intersections:

Dogwood Road/McCabe Road
Dogwood Road/Willoughby Road
Jasper Road/Scaroni Road
Jasper Road/SR-111
Dogwood Road/Cole Road

Existing Plus Total Project (All Phases)

With the addition of 59,285 ADT from the Total Project (All Phases) to the existing conditions no roadway segments or intersections will be directly impacted. However, cumulative impacts were identified that are discussed in Section 5.0 Cumulative Impacts of this EIR.

4.3.4.2 Other Circulation Issues

A. Air Traffic Patterns

Based on the Initial Study that was prepared for the project which is provided in Appendix A of this EIR, the generation of air traffic is not a component of the project; therefore, no to air traffic patterns is identified.

B. Design Feature Hazards

No design features of the project were identified as creating a traffic hazards. Therefore, a less than significant impact is identified for this issue area.

C. Emergency Access

The project will be designed in accordance with the City's design regulations to have adequate access for emergency services. Therefore, a less than significant impact is identified for this issue area.

D. Parking

As discussed above, the proposed project will provide parking in excess of the amount of parking required for the project per the City of Calexico Zoning Ordinance Chapter 13. Therefore, a less than significant impact is identified for this issue area.

E. Alternative Transportation

As discussed above, with compliance with the City of Calexico Bicycle Master Plan and implementation of Mitigation Measure T11 a less than significant impact to adopted policies, plans, or programs supporting alternative transportation is identified for the proposed project.

F. Railroad Crossings

Future road improvements, identified in this EIR to mitigate traffic impacts, that affect railroad crossings will require approval of the Public Utilities Commission. It is anticipated that this process will ensure safety is maintained at railroad crossings. Impacts would be less than significant.

4.3.5 Mitigation Measures

4.3.5.1 Existing Plus Casino Phase Only

The following describes the mitigation measures will need to be implemented to reduce significant transportation/circulation impacts, associated with the Casino Phase developed under the existing conditions, to below a level of significance.

A. Roadway Segments

No mitigation is required as no direct impacts were identified.

B. Intersections

T1 Jasper Road/SR-111

Prior to the opening for business of any portion of the Casino Phase of the proposed project, the project applicant shall complete construction of an additional eastbound left turn lane.

4.3.5.2 Existing Plus Casino Phase and Phase 1

The following describes the mitigation measures which will need to be implemented to reduce significant transportation/circulation impacts, associated with the Casino Phase and Phase 1 developed under the existing conditions, to below a level of significance.

A. Roadway Segments

T2 **Dogwood Road: I-8 to McCabe Road**

Prior to the opening for business of any portion of Phase 1 of the proposed project (assuming Casino Plaza buildout is complete), the project applicant shall complete construction of a four lane major roadway and all related roadway and infrastructure improvements in accordance with the specifications of the County of Imperial.

T3 **Dogwood Road: McCabe to Heber Road**

Prior to the opening for business of any portion of Phase 1 of the proposed project(assuming Casino Plaza buildout is complete), the project applicant shall complete construction of a four lane major roadway and all related roadway and infrastructure improvements in accordance with the specifications of the County of Imperial.

T4 **Dogwood Road: Heber to Jasper Road**

Prior to the opening for business of any portion of Phase 1 of the proposed project(assuming Casino Plaza buildout is complete), the project applicant shall complete construction of a four lane major roadway and all related roadway and infrastructure improvements in accordance with the specifications of the County of Imperial.

T5 **a. Jasper Road: Scaroni Road to SR-111**

Prior to the opening for business of any portion of Phase 1 of the proposed project(assuming Casino Plaza buildout is complete), the project applicant shall complete construction of a four lane major roadway and all related roadway and infrastructure improvements in accordance with the specifications of the City of Calexico.

b. Jasper Road: SR-111 to Bowker Road and one-half mile east of Bowker Road

Payment of fairshare contributions as identified in Table 5-17 in segments.

B. Intersections

T6 **Dogwood/McCabe (North/South)**

Prior to the opening for business of any portion of Phase 1, the project applicant shall realign McCabe Road at Dogwood Road and install an additional traffic signal.

T7 **Dogwood Road/Willoughby**

Prior to the opening for business of any portion of Phase 1, the project applicant shall complete installation of an additional traffic signal, realign onto the Jasper Road realignment, and add a southbound left turn lane.

T8 Jasper Road/Scaroni Road

Prior to the opening for business of any portion of Phase 1, the project applicant shall complete installation of an additional traffic signal and westbound left/northbound right lane. This intersection shall be realigned with development of the proposed project.

T9 Jasper Road/SR-111

Prior to the opening for business of any portion of Phase 1, the project applicant shall complete installation of additional traffic lanes, including east/west through lanes, left turn lanes, a northbound left turn lane, and southbound right turn lane.

T10 Dogwood Road/Cole Road

Prior to the opening of any portion of Phase 1, the project applicant shall complete installation of an additional traffic signal.

T11 Transportation Demand Management

In addition to the measures described above, 90 days prior to occupancy of any phased development of the project, the Applicant shall prepare and submit a Transportation Demand Management Plan for review and approval by the City of Calexico. The plan, at the minimum shall include and describe the following: how transit services will be provided to the project site; plans for private shuttle/bus service to and from the casino; measures to reduce employee trips to the site such as employee ride sharing programs and transit ridership incentives; and, detail how the applicant supports bicycle access to/from the project site.

4.3.6 Conclusion

The proposed project will result in transportation/circulation impacts associated with roadway segments and intersections. Implementation of Mitigation Measures T1 through T10 will reduce these impacts to a level less than significant. Tables 4.3-18 though 4.3-20 summarize the conditions of impacted roadway segments and intersections after Mitigation Measures T1 though T10 are implemented. Implementation of Mitigation Measure T11 would ensure that the proposed project would promote alternate transportation, which would ultimately help to reduce traffic and the associated air quality impacts of the project. In addition Figures 4.3-24 and 4.3-25 depict the Existing Plus Casino Phase and Phase 1 Intersections with Mitigation for the north study area and south study area, respectively.

TABLE 4.3-18
Existing Plus Casino Phase Mitigated Intersection Operation

Intersection	Mitigation	Existing + Casino Phase			
		AM Peak		PM Peak	
		Delay	LOS	Delay	LOS
Jasper Road/SR-111	Construct Eastbound Left Turn Lane	14.9	B	31.2	C

Note: Delay is measured in seconds per vehicle; LOS=level of service; Delay and LOS calculated using SYNCHRO (with HCS value).
Source: Darnell & Associates, 2008.

TABLE 4.3-19
Existing Plus Project (Casino Phase + Phase 1)
Mitigated Roadway Segment LOS

Roadway Segment	Mitigation	LOS E Cap.	Casino Phase + Phase 1		
			ADT	V/C	LOS
Dogwood: I-8 to McCabe	Construct 4-Lane Major Roadway	25,000	15,485	0.619	B
Dogwood: McCabe to SR-86	Construct 4-Lane Major Roadway	25,000	16,672	0.667	B
Dogwood: SR-86 to Jasper	Construct 4-Lane Major Roadway	25,000	16,071	0.643	B
Jasper: Scaroni to SR-111	Construct 4-Lane Major Roadway	25,000	17,879	0.715	C

Note: LOS=level of service; ADT=Average daily traffic; V/C=volume to capacity ratio; Maximum LOS E Capacity per County of Imperial/City of Calexico.

Source: Darnell & Associates, 2008.

TABLE 4.3-20
Existing Plus Casino Phase and Phase 1
Mitigated Intersection Operation

Intersection	Mitigation	Existing+Casino Phase+Phase1			
		AM Peak		PM Peak	
		Delay	LOS	Delay	LOS
Dogwood/McCabe South	Align intersections and construct signal	4.8	A	7.4	A
Dogwood/Willoughby	Construct Signal and Southbound Left Turn Lane	13.7	B	11.5	B
Jasper/Scaroni	Construct Signal and Westbound Left/Northbound Right Turn Lane	29.4	C	18.7	B
Dogwood/Cole	Construct signal	4.7	A	9	A
Jasper/SR-111	Construct Eastbound left, Eastbound Through, Eastbound Right, Westbound Left, Westbound Through, Northbound Left, and Southbound Right	24.4	C	34	C

Notes: Delay is measured in seconds per vehicle; LOS=level of service; Delay and LOS calculated using SYNCHRO (with HCS value).

Source: Darnell & Associates, 2008.

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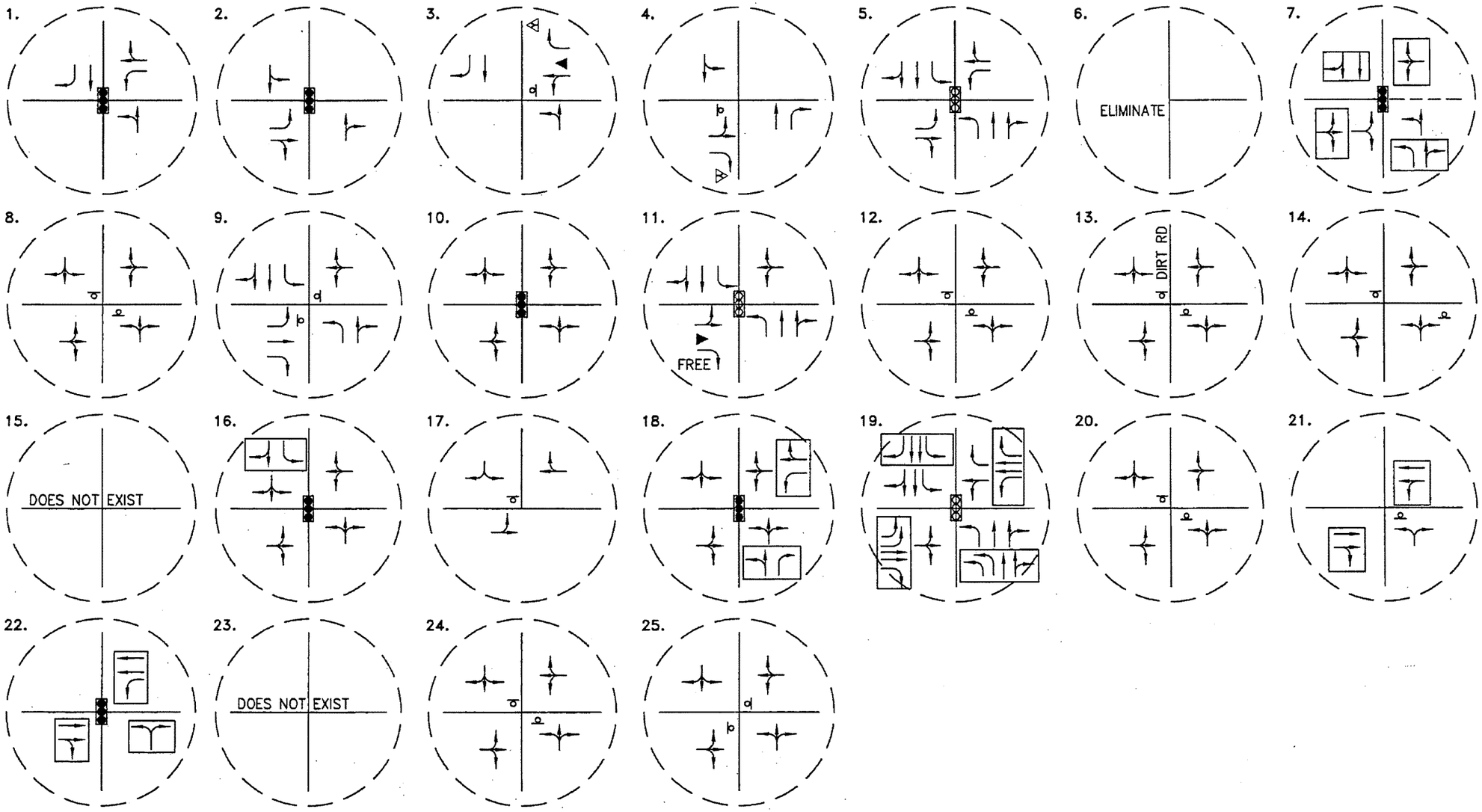

SOURCE: Darnell & Associates, Inc., 2008

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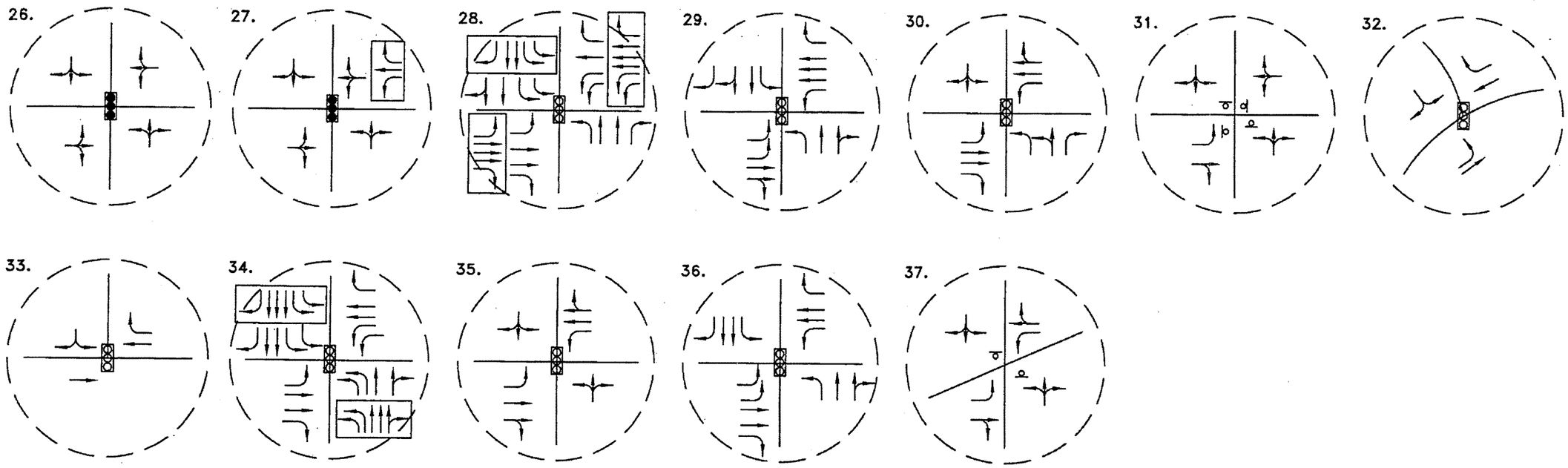
Existing + Project (Casino Phase + Phase 1) Intersection Mitigation - North

FIGURE 4.3-24

F:\projects\634 Calexico\2nd Screencheck Draft EIR\Chapter 4\Figure 4.3-24 Existing + Project (Casino Phase + Phase 1) Intersection Mitigation North.ai



SOURCE: Darnell & Associates, Inc., 2008

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Existing + Project (Casino Phase + Phase 1) Intersection Mitigation - South

FIGURE 4.3-25

F:\projects\634 Calexico\2nd Screencheck Draft EIR\Chapter 4\Figure 4.3-25 Existing + Project (Casino Phase + Phase 1) Intersection Mitigation South.ai